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AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS FOR 1994

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Agriculture, Rural Development, Foo...

...INGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

RICHARD J. DURBIN, Illinois *Chairman*

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MARCY KAPTUR, Ohio
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JAMES T. WALSH, New York

ROBERT B. FOSTER, TIMOTHY K. SANDERS, and CAROL MURPHY, *Staff Assistants*

PART 7

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS

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AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS FOR 1994

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS

TUESDAY, MARCH 23, 1993.

CONSERVATION AND RESEARCH PROGRAMS

WITNESS

HON. GLENN ENGLISH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Mr. DURBIN. I would like to call this meeting of the Appropriations Subcommittee on Agriculture, Rural Development, Food & Drug Administration and Related Agencies to order.

We will, this afternoon, consider what have been characterized as outside witnesses. We are going to call them public witnesses now. We decided that that was a friendlier term.

In the first round, we will bring before us from the great state of Oklahoma, the Honorable Glenn English.

Mr. ENGLISH. Thank you, Mr. Chairman. Am I public? Is that what I am? [Laughter.]

Mr. DURBIN. I think we are all trying to be outsiders in this election climate.

Mr. ENGLISH. Well, thank you very much, Mr. Chairman, and certainly it is a pleasure to be here and be before the subcommittee and to recognize a number of the environmental programs that were authorized back in the 1990 Farm Bill but have either not been funded or have not received adequate appropriations to demonstrate their effectiveness.

The Food & Security Act of 1985, as you are well aware, was a turning point in American agriculture. In addition to the Conservation Reserve Program which encouraged the retirement of highly erodible crop land, the conservation compliance was tied to the eligibility of the USDA program benefits to the implementation of the conservation plan on such land.

The resource conservation programs approved in the 1990 Farm Bill were endorsed by both the environmental and commodity organizations, something that certainly seemed nearly impossible back in 1989.

In a rare show unanimity, both the traditional farm organizations and environmental groups agreed that conservation programs to be effective should provide two elements: one, incentives and, two, to be voluntary.

Both the Water Quality Incentive Program and the Wetlands Reserve meet these two criteria.

During the appropriations cycle for fiscal year 1993, there was no funding for any of the new CRP contracts nor the wetlands reserve program and the water quality incentive programs received only $15 million. Obviously the competition for scarce agricultural dollars necessitated hard choices for the appropriations committee. However, as Chairman of the Subcommittee on the Environment, Credit and Rural Development, I remain concerned that we have not completely lived up to the obligations either to the environmental community or to our producers, Mr. Chairman.

As the subcommittee wrestles with the difficult choices which must be made to meet the budget requirements for agriculture, I ask that you recognize the demands that are being placed on our producers. I know that you recognize the challenges: a January 1, 1995 deadline for conservation compliance which affects 140 million acres of highly erodible land, 40 percent of all farmers and it involves 1.6 million plans and an effective ACP cost/share commitment to meet the federally mandated requirements; non-point pollution requirements under the Clean Water Act for which funding for water quality incentive programs would help producers minimize the groundwater and surface water pollution and a strong policy to prevent further loss of our wetlands. And certainly I know that this subcommittee remains committed to protecting this nation's great agriculture production base through good conservation practices.

Therefore, Mr. Chairman, I would respectfully request your assistance in helping our farmers and environmentalists across the country to meet the increasing environmental demands that are placed on farmers' operations.

I might also say, Mr. Chairman, in my own district, I wanted to make a plea for a couple of projects that are very important. We have been very fortunate in Guymon, Oklahoma to have a company that has announced a major pork producing production facility. It is a $50 million state-of-the-art plant in a community of 7800 people. This plant will eventually employ up to 1300 people with an annual payroll of $27 million. Obviously it is a major project for that part of the country and Guymon, with 7800 people, is the largest city in that particular region.

The Guymon Industrial Authority is seeking assistance to help out in enhancing the processing capability through the use of additional space. And if they are able to get a little bit of assistance in increasing the space, they will be able to add 300 more jobs to the planned 500 jobs when this plant begins operations in 1994.

And so what I would ask the subcommittee to do is consider directing the RDA to provide $500,000 in funds from the industrial development grant program to the Guymon Industrial Authority for constructing this enhanced facility.

The second project I want to bring to the subcommittee's attention is one that it is familiar with. It is an ongoing expanded wheat

pasture research program and it is one that the committee has funded in the past. I would ask the subcommittee for an additional $400,000 through the USDA's CSRS special research grant program.

This is a research program through the Oklahoma State University and it involves about 500 acres of wheat pasture, a weather station and cattle receiving and weighing and handling facilities that comprise the elements of the project.

It enhances the income in Oklahoma to our producers; it would increase in fact from $131 million up to a potential $308 million, improving the technical efficiencies of production of some 1.5 million head of stocker cattle. That mainly means they are going to be on wheat pasture longer than they would have to before they are being finished off in a feed lot so obviously this would be big savings to farmers. It is a good research project and it is one that is given very high priority by Oklahoma State University and it is highly supported by the chambers of commerce in western Oklahoma, Mr. Chairman.

Mr. DURBIN. Thanks, Mr. English.

Let me ask you about your conservation programs in particular. Do you have an estimated cost on the CRP program, the wetlands reserve program or the water quality incentive program?

Mr. ENGLISH. Well, what we have obviously is the authorization levels. I would have to get those authorization caps. I do not have them with me right now. But we have only put about $15 million into all of those programs. In fact, as I mentioned the CRP program, we have not had any funding at all. So we would like to obviously have an improvement over last year's funding levels.

The real thing that I am concerned about, Mr. Chairman, is that we had a very delicate balance that was struck between environmental groups and farmers and I think that that is something that we should be encouraging. Instead of what I think many projected would be all out warfare between these two groups in the 1990 Farm Bill, we were able to reach an agreement.

Now, part of that agreement was that we would authorize these programs and move to improve particularly the quality of water and it is something that I think we would all agree needs to be done and we all support. But I think there is the concern that—and one of the reasons I wanted to be here and to plead very forcefully if I could for additional funding and moving into full funding on all of these programs to maintain this type of cooperation between environmentalists and farmers.

I think that that is something that is very good for the environment of our nation and I think it is very good as far as our farmers are concerned.

Mr. DURBIN. You on the agriculture committee can be commended for that effort on the Farm Bill and I was happy to support it. We face a little different challenge here in trying to take limited resources and put them to work to do the many things that we have been asked to do and certainly you have identified a very high priority.

I want to work with you. You and I have had private conversations on this in terms of where we are headed and agricultural policy. We will do our best to try to meet these needs but I have to

confess to you, the wetlands reserve program I think has demonstrated its popularity much to the chagrin of people who were trying to draw up a budget. If we try to do this nationwide, I do not know how we would ever pay for it and that is one of the difficulties we face.

Mr. ENGLISH. I think that is true. And I think that those of us on the agriculture committee recognize that and I know that you all certainly do here. You come right up against it each time that you have to come up with an appropriations bill. And I want to commend you for making a very few dollars stretch as far as you do. I think you all do an outstanding job on that.

I do not think there is any question we are probably going to have to take a different approach in the way that we handle much of what we have considered to be traditional programs in agriculture just to reach that goal, making very few dollars stretch much further. At the same time, I think that we have got to recognize that we do have some major changes that are taking place, not only in American agriculture but certainly in government and the way that we approach these problems and I am looking forward to working with you in trying to find some innovative ways in which we can achieve the objectives and at the same time do so so it benefits both farmers and the environment.

Mr. DURBIN. I have been talking up the Glenn English plan for shaping up American agriculture in my district and I cannot wait to see the details on it. We will be working together.

Thank you very much for joining us.

Mr. ENGLISH. Thank you, Mr. Chairman. I deeply appreciate that.

[The information follows:]

TESTIMONY OF REP. GLENN ENGLISH
CHAIRMAN OF THE SUBCOMMITTEE ON THE
ENVIRONMENT, CREDIT AND RURAL DEVELOPMENT
SUBMITTED FOR THE RECORD
SUBCOMMITTEE ON RURAL DEVELOPMENT,
AGRICULTURE AND RELATED AGENCIES
MARCH 23, 1993

I am pleased to appear before the Subcommittee today to prevail upon you, Mr. Chairman, to recognize the number of environmental programs which were authorized in the 1990 farm bill but have either not been funded or have not received an adequate appropriations to demonstrate their effectiveness. The Food Security Act of 1985 was a turning point for American agriculture. In addition to the Conservation Reserve Program which encouraged the retirement of highly erodible cropland, conservation compliance tied eligibility for USDA program benefits to the implementation of a conservation plan on such land. Later with the passage of the Food, Agriculture, Conservation and Trade Act in 1990, additional environmental programs were enacted to assist our producers combat water pollution. Some would argue that if present trends prevail, producers will continue to be asked to accomplish more that does not directly relate to the production of food and fiber.

The resource conservation programs approved in the 1990 farm bill were endorsed by both environmental and commodity organizations, something that seemed impossible at the outset of debate back in 1989. In a rare show of unanimity both traditional farm organizations and environmental groups involved in farm bill negotiations in 1990 agreed that conservation programs to be effective should provide two elements: (1) incentives and (2) be voluntary. Both the **Water Quality Incentive Program** and the **Wetlands Reserve** meet these two criteria.

During the appropriations cycle for Fiscal Year 1993, there was no funding for any new CRP contracts, nor the wetlands reserve program and the water quality incentive program received only $15 million. Obviously, the competition for scarce agricultural dollars necessitated hard choices for the Appropriations Committee. However, as Chairman of the Subcommittee on the Environment, Credit and Rural Development, I remain concerned that we have not completely lived up to our obligations to the environmental community and to our producers. Prioritizing of federal conservation dollars will ultimately decide the fate of these and other conservation programs.

As the Subcommittee wrestles with the difficult choices which must be made to meet budget requirements for agriculture, I ask you to recognize the demands being placed on our producers. I know you recognize the challenges: a January 1, 1995, deadline

for conservation compliance which affects 140 million acres of highly erodible land, 40% of all farmers and involves 1.6 million plans and an effective ACP cost/share commitment to meet federally mandated requirements; nonpoint pollution requirements under the Clean Water Act for which funding for the water quality incentive program would help producers minimize groundwater and surface water pollution, and a strong policy to prevent further loss of our wetlands. In closing, I know that this Subcommittee remains committed to protecting this nation's great agriculture production base through good conservation practices. I, therefore, respectfully request your assistance during this critical time to help farmers across the country meet the increasing environmental demands placed upon their operations.

TESTIMONY OF REP. GLENN ENGLISH
SUBMITTED FOR THE RECORD
SUBCOMMITTEE ON RURAL DEVELOPMENT,
AGRICULTURE AND RELATED AGENCIES
MARCH 23, 1993

Mr. Chairman, and Members of the Subcommittee, I am pleased to appear before you today to present testimony in support of two projects of importance to Oklahoma as well as other agricultural states.

First, I am asking the Subcommittee to consider providing funds to the Guymon, Oklahoma Industrial Authority through the Rural Development Administration's (RDA) Industrial Development Grant program. The funds would be used to bring an additional 300 jobs to the rural community of Guymon and the panhandle area of my state.

Residents of Guymon are celebrating the recent decision of Seaboard Farms, Inc. to locate a $50 million state-of-the-art pork production facility in their community of 7,800. When the first phase of operations begins in late 1994, the company will employ 500 people in a single shift operation with a payroll of $8 million annually. By 1998, it is anticipated the facility will be operating at full capacity, employing up to 1,300 people with a annual payroll of $27 million. Annual gross sales are expected to exceed $700 million.

Last fall, Guymon residents overwhelmingly passed a one cent sales tax to finance the incentives necessary to attract the company. Local citizens are committed to the success of this project and are willing to dig deep into their pockets to bring jobs to their rural community.

The Guymon Industrial Authority is seeking assistance in helping the company enhance its production at the Guymon facility during phase one of its operations. Specifically, the company will be able to add 300 more jobs to the planned 500. The building which the Authority is providing to Seaboard is large enough to accommodate only the initial processing of pork products. In order to accommodate enhanced processing capability (i.e. producing smoked and specialty meats), additional space must be available. The Authority would like to construct a second processing facility adjacent to the primary structure to increase the number of jobs being created by this new company.

Accordingly, I am asking the Subcommittee to consider directing the Rural Development Administration to provide $500,000 in funds from the Industrial Development Grant program to the Guymon Industrial Authority for the construction of this

enhanced production facility. With this critical assistance, not only will Guymon and communities within the rural panhandle of Oklahoma benefit from the hundreds of new jobs created by Seaboard, but, so too, will communities in the adjacent states of Texas, New Mexico, Colorado, and Kansas. Indeed, this is a unique rural development project that will truly have a broad regional impact on jobs and the many small communities within the region.

The second project for which I wish to request funding from the Subcommittee is for the on-going **Expanded Wheat Pasture** Research Program. To continue the important work now conducted by Oklahoma State University, I would ask the Subcommittee for $400,000 through the USDA/CSRS Special Research Grants program. The Wheat Pasture Research Unit at OSU is a multidisciplinary project and is the first of its kind in the U.S. Approximately 505 acres of wheat pasture, a weather station, cattle receiving and weighing and handling facilities comprise the elements of the project. Annual income in Oklahoma could be increased by $131 million with a potential of reaching $308 million by improving the technical efficiency of production of the 1.5 million head of stocker cattle that are grown to heavier weights on wheat pasture prior to being finished in the feedlots. This project is given high priority by OSU and the Chambers of Commerce in western Oklahoma and will continue the important work which Congress has recognized in its first appropriations during 1989-90.

FY 1994 Budget Requests:

1.	Guymon Industrial Authority (RDA Industrial Grant)	$500,000.00
2.	OSU Expanded Wheat Pasture (CSRS Special Research Grants)	400,000.00
	TOTAL:	**$900,000.00**

NUTRITION PROGRAMS

WITNESS

HON. WILLIAM F. GOODLING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. DURBIN. Congressman Bill Goodling. Glad to have you here. Bill, you notice this is a smoke-free room?

Mr. GOODLING. Yes, I noticed it is a smoke-free room.

Mr. DURBIN. Well, we are glad to have you here, too.

Mr. GOODLING. I am all for it.

Mr. DURBIN. Good. Please proceed.

Mr. GOODLING. Thanks, Mr. Chairman.

Mr. Chairman, last week I was asked to vote on billions of unspecified cuts and unspecified income and today I am testifying on unspecified whatever in a budget that I have not seen and I guess we will not see until April 5th, I suppose. April 5th, perhaps.

Let me just touch on two items.

Chairman Perkins was always known as the father of school lunch and child nutrition and many people would refer to me as the son of school lunch and child nutrition and I like that, that feels pretty good. And so in the past, I have come primarily to testify "do not pay any attention to what the administration said about reducing the subsidy to the paying customer in the school lunch program" and then I would try to explain how it really is not that at all—that it really is just a subsidy to try to keep the school lunch program going.

But I do not know if there is anything in the president's budget dealing with any reductions as far as school lunch and child nutrition are concerned, so I would just merely say that the school lunch program is very, very important. The school breakfast program is very, very important. You cannot teach a hungry child and many of the children that come to school come without any food at breakfast and have nothing at lunch unless there is a national school lunch program available for them.

The second area that I would touch on is that having been a strong supporter of WIC and WIC increases and so on over the years, I guess I would just merely caution us that we do not move so rapidly to increase the program level that the administrative infrastructure that is there at the State and local levels would not be able to handle such increases would commit errors of omission and commission and so on and then give a bad name to a program that is doing quite well.

So, again, I would look forward to coming back and testifying before you when I know what is in the president's budget and if I were to see anything that would be detrimental to the school lunch and child nutrition programs that we have been supporting for a long, long time on the Education and Labor Committee.

Mr. DURBIN. I am brand new to this chair during this session, so you can help me along here.

In your experience, has there been any effort to coordinate the nutrition standards and the various feeding programs for children in America such as the WIC program, the feeding at Head Start programs now, the school lunch programs and even food stamps?

Mr. GOODLING. Yes, there has been—there was a time one time when we got into all sorts of trouble, when they came up with trying to determine what were vegetables and what were fruits and all those kinds of things.

Mr. DURBIN. I remember that.

Mr. GOODLING. And catsup and relish and all those kinds of things. More must be done, however, I think to make sure that we do have a coordinated effort and that we do truly understand what a nutritious program is and what is a good, balanced diet, whether it is in connection with the school lunch, or the school breakfast programs. More should be done in the area of coordinating.

Mr. DURBIN. Let me ask you one last question.

There are some who believe that money spent to bring in the last few eligible recipients in category I in WIC is probably wasteful in that it is very difficult to bring in the last few people. They feel the money might be better spent in some other area which would serve the cause of prenatal health and the nutrition for infant children better. What is your own position on that?

Mr. GOODLING. I would agree that there is that possibility and that also there is a possibility that perhaps more effort in education might be more beneficial. I think we have a long way to go yet in the WIC program when it comes to helping mothers in particular understand nutritious habits—whether it is eating, exercise, whatever it may be. So I would not be a bit surprised if money would be better spent on the education side than in bringing in those last few eligible recipients.

And, as I said before, I think we just have to make sure that we do not overburden a system that likely cannot handle an even more rapid increase, that we have a steady increase. But, again, I cannot emphasize the educational part of the program enough.

Mr. DURBIN. We are of like mind on that. I thank you for coming today and for your contribution.

Mr. GOODLING. Thank you. And I have a prepared statement that says a little bit more but not too much.

Mr. DURBIN. Thanks a lot, Bill.

[The information follows:]

THE HONORABLE WILLIAM F. GOODLING OF PENNSYLVANIA
TESTIMONY BEFORE THE
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
March 23, 1993

Mr. Chairman, Congressman Skeen, at the time I requested an opportunity to appear before you to express my recommendations on the Fiscal Year (FY) 1994 funding of the domestic food accounts under the authorizing jurisdiction of the Committee on Education and Labor, along with most of us I believed the Administration was intending to forward its FY 1994 Budget late in February or early in March, so I thought I'd have an opportunity to key my remarks to the Administration's proposals. Then we all learned the Request's transmittal had been scheduled for today, so I thought that at least I'd have a quick opportunity to glance at what the Administration was proposing for nutrition programs other than the Special Supplemental Food Program for Women, Infants and Children (WIC) before I appeared before you this afternoon. But as we all now know, the FY 1994 Budget Request will not be presented to us until April 5.

So as things stand, all I definitely know about the Administration's FY 1994 plans for our nutrition programs is that it intends to continue increasing WIC's funding in FY 1994 and FY 1995 with the view of bringing the program to a "full funding" level of approximately $4.1 billion by FY 1996. When he appeared before our Subcommittee on Elementary, Secondary and Vocational Education about a month ago to testify on the status of our Child

Nutrition programs, Secretary of Agriculture Mike Espy was not able to provide us with any really hard information on funding. He advised us that on the basis of having been given a glance at the FY 1994 Budget Request for nutrition programs, he believed he "could say in all honesty that this is the first time in 12 years that we are going to be coming before you asking for an increase in programs for food and nutrition." When we asked him whether the Budget Request would incorporate legislative initiatives, he replied affirmatively, but quickly added that at that juncture in the preparation of the President's Request it wasn't clear whether such initiatives would be comprehensive in nature. And yes, I've heard the rumor that the Administration will no longer confront us with the need to fight for Section 4 cash payments and entitlement commodity assistance for "paid" meals in the School Lunch Program -- a rumor, which if true, will certainly bring a sigh of relief from me.

Those of us who know the WIC program in detail and have steadily supported moderate increases in its funding in past years are well aware of its achievements. We know its success in improving pregnancy outcomes, in reducing low birthweight births, and in saving medical costs -- indeed, we have learned that prenatal participation in WIC has resulted in each WIC dollar producing Medicaid savings ranging between $1.77 and $3.13, and that WIC accounts for more than one-half of the Federal dollars

spent by State health agencies. Our concern for the program had led us to balance a desire to see it increasingly respond to need with a desire to assure that its growth will not overwhelm its administrative infrastructure and lead to administrative errors of commission and omission. We have not wanted to see WIC subjected to the criticisms that often result from taxing the administrative capabilities of State and local delivery systems. Frankly, I wish we could learn more about how these delivery systems are working today before we "push" the program to the levels suggested by the Administration.

As for the multiple programs funded under the Child Nutrition account, we are proud of the broad array of public policy interests they address, i.e., educational, nutritional, and agricultural. We know that we have supported and nurtured these programs in past years so that today aid to the school breakfast and lunch programs is the second single largest source of Federal aid to the Nation's elementary and secondary schools, and so that today more lower income children receive free or reduced-price meals under these programs than receive Food Stamp benefits. The Child and Adult Care Food Program is the largest source of direct Federal support for child care. And we are well aware of how farmers and food processors have benefited from the increased food consumption generated by the programs.

Quite frankly, Mr. Chairman, I am reluctant to offer you any recommendations on the FY 1994 funding of the various programs and activities under the Child Nutrition account until I am able to examine the Administration's Budget Request for them. I would respectfully request you to give me the opportunity to submit written views on the President's budget after April 5 so that I may express my views on the important programs under this Subcommittee's jurisdiction.

RURAL ELECTIFICATION PROGRAMS

WITNESS

BOB BERGLAND, EXECUTIVE VICE PRESIDENT, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. DURBIN. Former congressman, former Secretary of Agriculture and today representing the National Rural Electric Cooperative Association, our friend from Minnesota, Bob Bergland.

Good to see you, Bob.

Mr. BERGLAND. Thank you very much, Mr. Chairman.

Mr. DURBIN. The last time I saw you, it was Greenville, Illinois.

Mr. BERGLAND. Yes, sir. I enjoyed that place.

Mr. DURBIN. Glad to have you here.

Mr. BERGLAND. Thank you, sir.

Mr. Chairman, I have a statement I would like to submit for the record and I am here today to ask the committee to consider reauthorizing the REA lending levels at last year's level and to appropriate the needed monies to maintain the staff at REA so an adequate job can be done, and to urge consideration of funding of a special provision in the last farm bill which would allow rural electric cooperatives access to funding for water and sewer activities on a matching basis. This provision was authorized in a recent farm bill but never filled by appropriations and we think that this is a function that needs to be examined very carefully. We would like to start out with a modest program and test the feasibility.

Mr. Chairman, the budget not being presented by the administration creates a little bit of a problem for us but there has been some advance word on what is likely to come.

It appears from what the president has said and from press statements at least that the president is going to propose some fairly substantial restructuring of the REA. We are working with the authorizing committees of the House and Senate and with the administration to see if there is some way that some agreement can be struck and until we know the budget numbers, of course, nothing much can happen but this whole matter of some changes in the REA lending program is probably going to be just taken up this year by the authorizing committee. But until the law is changed, we would suggest that the lending levels proceed the same as last year and the numbers are detailed in my testimony.

Thank you, Mr. Chairman.

Mr. DURBIN. I take it from your testimony, Bob, you are really hedging your bet, waiting to see what the specifics are from the administration before you have to sit down at the table and negotiate some changes in policy.

Mr. BERGLAND. Yes, we are. The appeal we are making to the authorizing committees and to the budget committees of the House and Senate was that whatever change is agreed to we need to be treated fairly and we compare ourselves with the municipally owned utility systems. We believe it is unfair to have a double standard in utility finance, one standard for those who live within corporate city limits and another more difficult standard for those who live on the outside.

Rural electric cooperatives have a difficult task. We have only five families on a mile of line. Our revenue per mile of line is only a fraction of the city systems. The lack of density, the lack of industrial loads makes it very difficult for the electric cooperatives to do the job expected. We do it and we do not complain about it but we think it would be unfair to single out the rural electric cooperatives for especially harsh treatment and putting us at a disadvantage vis-a-vis the utilities from cities and towns.

And so our plea will always be treat us fairly, treat us like the rest. No better, no worse.

Mr. DURBIN. Well, I think that there is definitely an opportunity for us to talk about some reorganization and reform that could still benefit your agency consistent with the President's budget goals and policy goals.

I will tell you that I share your feeling. I do not think there is another agency of government that is really tasked with the responsibility of rural development as REA is. Those who would criticize it as having outlived its usefulness, I think, do not live in small town America as I do, where we need help in getting the economy back on its feet, and the REA is one of the few engines to pull that train.

We are going to work with you, Bob.

Mr. BERGLAND. Thank you, Mr. Chairman.

Mr. DURBIN. Thanks for joining us today and once we get the President's figures, we will have a chance to sit down and talk more specific terms.

Mr. BERGLAND. Thank you, Mr. Chairman.

Mr. DURBIN. Thank you.

[The information follows:]

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Testimony of

Bob Bergland

Executive Vice President
National Rural Electric Cooperative Association

before the
U.S. House of Representatives

Committee on Appropriations
Subcommittee on
Agriculture, Rural Development, Food & Drug Administration and Related Agencies
March 23, 1993

Executive Summary: Rural electric systems continue to provide high quality electric service to more than 25 million rural Americans. During FY 92, these systems borrowed $609 million from REA and repaid $3.2 billion in interest and principal payments. Rural electric systems operate under several disadvantages, including: (a) low consumer revenue and densities; (b) high investment per consumer, and (c) the fact that 70 percent of neighboring rural electric systems have rates higher than their neighboring utilities.

Despite these obstacles, rural electric systems provide essential services to rural communities. The Administration's budget proposals, however, would add to these obstacles by eliminating interest subsidies on rural electric loans, which would lead to higher rates and stymied business growth. Only rural electrics, among the electric utilities, are singled out for cuts in federal assistance. Rural electric systems do not object to federal assistance that flows to municipal and investor-owned electric utilities: They simply want to be treated fairly.

Accordingly and, despite our $700 million backlog of pending insured loan applications, NRECA recommends that REA loan program levels for fiscal year 1994, remain at the same levels as enacted by Congress for fiscal year 1993. For the REA insured loan program, a minimum level of $625,035,000, with a ceiling of $933,075,000. The Association also recommends appropriations to fund the Rural Economic Development Subaccount, the matching loan program for water and wastewater treatment, as well as adequate amounts for salaries and expenses.

For REA loan guarantees of Federal Financing Bank (FFB) loans, the Association recommends a floor of $813,450,000 and a ceiling of $1,961,850,000.

Mr. Chairman and distinguished members of the Subcommittee: for the record, my name is Bob Bergland. I am executive vice president of the National Rural Electric Cooperative Association (NRECA), and I submit this testimony on behalf of the nation's 1,000 nonprofit, consumer-owned rural electric systems, which provide electric service to more than 25 million rural Americans in 46 states.

Before I discuss NRECA's recommendations for REA lending levels, I would like to provide you and the members of the Committee with a brief report on the "State of the Program."

- Rural electric systems continue to provide high quality and reliable electric service to more than 10 percent of the population of the nation. Rural electric lines span some 75 percent of the nation's land mass.

- Recent data show that rural electric systems continue to operate under the same disadvantages that have traditionally existed in the program. Rural electric systems now serve an average of only 5 consumers per mile of line compared with 34 customers per mile of line for investor-owned electric systems, and 44 per mile for municipal systems.

- Revenue per mile of line for a rural electric co-op amounts to $6,505 annually, compared to the $56,582 collected by investor-owned utilities and $69,787 earned annually by municipal systems. Conversely, co-ops have invested $1,847 in distribution plant for each consumer compared to $1,408 per customer for investor-owned utilities and $1,361 per customer for municipal systems.

- Today, more than 70 percent of all rural electric systems have higher rates than their neighboring utilities. This disparity can be traced to several factors:

 - The inherent disadvantages of serving sparsely populated areas;

 - The fact that rural electrics serve relatively few commercial and industrial loads compared to other utilities, and

 - The fact that nearly 70 percent of the generation capacity of rural electric systems has been placed into operation during the past 15 years--a period of inflated construction costs and high interest rates, to comply with the clean air requirements of the 1972 Clean Air Act, and so has expensive, state-of-the-art pollution control equipment.

- Rural electric systems serve areas that have been hard hit by an ailing rural economy. This has drastically reduced load growth for many rural electric systems. In fact, today 85 of the nation's 920 rural electric distribution systems are losing consumers. We hope improvements in the rural economy will reverse this trend.

Rural electric systems comprise an integral, vital infrastructure component for rural America. In this time of great economic uncertainty throughout the Nation, and especially in rural areas, rural Americans and national leaders look to these cooperative electric systems to play a leadership role to implement programs that will provide jobs immediately.

Rural communities by and large compete at an inherent disadvantage in the acquisition of new business and in the development and expansion of local business. And many rural communities have not fully recovered from the economic devastation and subsequent outmigration of the past decade. For every million dollars of REA loans, approximately 51 jobs are created, about half in construction and the rest in the supply of goods and services to electric utilities. These are not part-time, minimum wage, make-work jobs: These are jobs for skilled and unskilled workers that pay well and carry benefits for employees.

These jobs generate dollars that stay in rural America to feed the small-town merchant and improve the tax base, and stimulate jobs in urban areas. Rural electric jobs provide a vital cash injection into a moribund economy at once and with long-term beneficial effects.

Rural electric systems are nearly unique community institutions in that they are in place with a long record of service, they have deep roots in the communities they serve, and because they are owned by those they serve, they have a civic agenda that extends even beyond the vital role of providing electric service. That civic agenda includes jobs creation and community development, provision of other essential utility services such as water and waste treatment, telecommunications, housing and a host of other desirable community services.

All utilities are financed in large measure by debt capital. Higher cost capital will mean higher rates, and higher rates discourage jobs creation and economic development, and the lack of such encourages migration to urban centers and even fewer consumers to share costs. Without new jobs and new enterprise, the tax base most probably will shrink, leading to additional curtailment of local service and further encouraging outmigration and discouraging business growth and expansion.

Significant as these difficulties are, rural electric systems have been able to accomplish much:

- Consumer-owned electric utilities paid the federal government more than $3.2 billion in loan interest and principal repayments in FY 1992; at the same time, these cooperatives borrowed $609 million from REA, resulting in net loan repayments to the U.S. Treasury of $2.6 billion;

- Some co-ops have been able to provide basic water and waste treatment

facilities;

- Cooperatives have been extremely active--and extremely successful--in leveraging federal rural development loans into economic stimulus packages that benefit local communities and create jobs and economic opportunity;

- In 1987, Congress authorized and funded at REA a small zero interest rural development program "for the purpose of promoting rural economic development and job creation projects." To date, REA has approved 314 projects totalling $27.2 million. Accordingly,

 - These REA dollars have leveraged $204.6 million in other capital that will create 6,713 direct jobs;

 - This program has a direct job creation per one million dollars of federal investment of **more than 245 to one**; and

 - The program has proven highly successful in leveraging capital: 7.5 non-REA dollars for each dollar of REA capital.

We can do more. We also believe that rural electric systems throughout the Nation can take on a larger role in economic stimulus programs through the extension of those very services that local community leaders seek desperately, namely water and waste treatment. I needn't remind this Committee of the fragile balance of many, many rural water and waste systems, and I needn't remind the Committee of the near impossibility of local communities with volunteer governments to meet rigid federal standards for water and discharge purity.

Rural electric cooperatives have engineering and construction experience and capability; they have accounting resources; they have incredible local support and their utility experience in billing, collection and servicing is an important indicator of success.

Rural electric systems are ready, willing and able to undertake to ever greater magnitude the responsibility for development and construction of such systems. This could be accomplished by local co-ops working with local water systems in productive partnership.

Mr. Chairman, this is a new Administration, and there is an aura of expectation, a breath of anticipation that perhaps change, real change, is indeed possible, that the reestablishment of confidence in government and the regeneration of a government closer to the people, fit, trim, and efficient, is doable and imminent.

Rural electric cooperatives are close to the people. And we would like to continue our successful working partnership with the government: especially for rural America. Where distance and population density and other factors impede development and

technological progress, there remains a vital, continuing, expanded role for rural electrification.

Based on what we have discussed here today, we would therefore recommend the following for rural electric loan levels and related matters for FY 1994:

- with regard to the REA insured loan program, that the floor for insured loans from the REA Revolving fund be retained at the FY 1993 level, a minimum of $625,035,000, with a ceiling of $933,075,000;

- that REA loan guarantees of Federal Financing Bank (FFB) loans be retained at the FY 1993 floor of $813,450,000 and a ceiling of $1,961,850,000;

- that the REA Administrator be directed to advance funds on loans which have already been approved by REA.

We respectfully request that the FY 1994 Agriculture Appropropriations bill include the following provisions:

1. Fund the matching loan program to REA borrowers for water and waste services. This provision authorizes loans to REA borrowers for water and waste services to unserved persons in their rural communities;

2. That adequate salaries and expenses be provided to support a minimum REA staff level of 550 employees. We estimate that about $41 million would be required to maintain that level, and

3. That, in view of the fact that the zero-interest loan program provided by the Rural Development Subaccount creates jobs and successfully leverages federal dollars, the Subaccount program is worthy of continued funding above the $12.4 million for FY 1993.

I appreciate the opportunity to appear before you today, and would be happy to answer any questions the Committee may have.

RURAL TELEPHONE PROGRAM

WITNESS

BOYD SPIKER, MANAGER, ROCK PORT TELEPHONE CO., ROCK PORT, MO

Mr. DURBIN. Mr. Boyd Spiker, the National Telephone Cooperative Association.

Glad to have you with us today. Do you have a group in town today?

Mr. SPIKER. The entire fan club.

Mr. DURBIN. Well, terrific. Now let us hear from the Adams County Telephone Co-Op. I think they are waiting in my office.

Mr. SPIKER. Some of them may be here.

Mr. DURBIN. Go ahead.

Mr. SPIKER. I have handed in a full statement for the record but I will summarize, be brief if I can.

Mr. DURBIN. Please.

Mr. SPIKER. My name is Boyd Spiker. I am the manager of Rock Port Telephone Company in Rock Port, Missouri. And Rock Port, Missouri has a service territory of about 200 square miles or about three times the size of the District of Columbia.

We provide about 260 miles of buried plant that serve only 1569 rural subscribers for a density, as Mr. Bergland indicated, of about six per mile. Density is a problem for us.

Rock Port Telephone Company is a member of the National Telephone Cooperative Association, which I am also representing today. I am the chairman of the NTCA's Government Affairs Committee and also a member of the REA task force that was formed by NTCA two years ago to assess our members use of and future need for the REA program.

We feel like we have played a vital role in working with Congress to assure a viable lending program for rural telephone subscribers in the future and we would like to continue to do that.

Rock Port Telephone Company has an active REA loan which has helped us to provide state-of-the-art telecommunication infrastructure in the Rock Port area. We are currently negotiating a fiber optic cable in preparation for providing interactive educational and medical link services which do not exist today in our rural area.

With that in mind, I would just like to point out that the REA telephone loans program time is now and, as you said earlier, it is very much a part of the infrastructure that is going on today.

In recent years, this subcommittee has built a substantial record establishing a relationship between affordable advanced telecommunications, infrastructure, its financing and the economic health of the nation.

The private and public partnership that is represented by the telecommunications industry use of the REA loan program has guaranteed all Americans can enjoy the benefits of universal telecommunications services.

The critics have repeatedly attempted to portray the job of the REA as being done and I guess to that we would like to point out that there are two jobs at REA at least, that is to furnish and improve rural service. And when we talk about improving rural serv-

ice for the national defense, international competitiveness and global leadership, the REA is about our best source of financing to do that.

Our industry does recognize the budget pressure that is on and spiraling debt and we have already taken a step 12 years ago to freeze our loans and by doing so have suffered by the inflationary factor each year for all of those 12 years. The freeze has remained in effect and we feel like we have done at least part of our part of helping address the situation.

And as your committee moves forward on the president's economic and budget proposals, we would like particular attention to be given to some of the following issues:

We would like to request a substantial amount of low cost capital always remain available for the most high cost, hardship and emergency situations.

We would like program interest rates to remain affordable and involve safeguard provisions to protect against the possibility of changing economic conditions that could lead to unaffordable rates.

We would like current program capital levels to be maintained to guard against the possibility of a future shortfall on the alternative sources of capital.

We would like to see the REA beefed up if we could in the technical and engineering area, perhaps with some of the professionals that would be displaced by the downsizing of the military industrial complex as that occurs.

And, last, the REA telephone bank should be provided relief from the Federal Credit Reform Act, which has been interpreted to wall off the bank's assets and has basically rendered the bank ineffective in many areas and it is costly for borrowers.

And, finally, the rural telecommunications industry is particularly concerned with the lack of coordination and cooperation that appear to be representative of the federal telecommunications policy today. The courts, the Congress, the administration and its agencies must remain abreast of one another's telecommunication policies as well as the capabilities of our industry.

We feel that we are up to the interactive challenge as we go forward down the road and we are asking for a chance to meet that challenge through keeping the REA healthy enough to help us.

Rural America in conjunction with the rural telecommunications industry can be a big part in our nation's future and we would like to keep that as one of the nation's highest priorities.

Mr. DURBIN. Thank you, Mr. Spiker. We appreciate your testimony. And since we are from the same part of the world, I can understand the importance of telephone coops in your community.

I would suspect, that, as we can probably recall a few years ago when President Eisenhower embarked on the interstate highway program, it virtually opened up America to so many different communities. We are about to embark on a new program under President Clinton in this effort to establish a national network of communications.

I think that may hold out some hope for development in a lot of communities today that are presently looking for that opportunity. I think that the telephone co-ops and the role played by the REA

are essential to make that happen and I will be working with you and your organization to do it.

I thank you for your testimony and we will make it part of the record.

Mr. SPIKER. Thank you. We appreciate it.

[The information follows:]



The Voice of Rural Telecommunications

STATEMENT OF BOYD SPIKER, MANAGER
ROCK PORT TELEPHONE COMPANY, ROCK PORT, MISSOURI
REGARDING FY 1994 REA TELEPHONE LOAN PROGRAM APPROPRIATIONS
before
U.S. HOUSE OF REPRESENTATIVES APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION AND RELATED AGENCIES
March 23, 1993

INTRODUCTION

Mr. Chairman, members of the subcommittee, my name is Boyd Spiker. I am the manager of the Rock Port Telephone Company in Rock Port, Missouri. Rock Port's service territory covers ABOUT 200 square miles, or an area about three times the size of the District of Columbia. Our cooperative has 260 miles of telephone line in place to serve our 1,569 rural subscribers. That amounts to just over 6 subscribers per mile of line.

Rock Port Telephone Company is a member of the National Telephone Cooperative Association (NTCA) which I am also representing here today. I am the chairman of NTCA's Government Affairs Committee and a member of NTCA's Rural Electrification Administration (REA) Task Force which was formed two years ago to assess our members' use of, and future need for, the REA telephone loan program. The task force has also played a vital role in assisting the association in responding to the program's critics, and in working with Congress to assure a viable lending program for rural telephone systems in the future.

REA'S TIME IS NOW

With that in mind, let me begin by stating unequivocally that the REA telephone loan program's time is now. In recent years, Congress has built a substantial record on the subject of the relationship between advanced telecommunications infrastructure, its financing , and the economic health of this nation. The private/public partnership that is represented by the telecommunications industry's use of the REA telephone loan program has guaranteed all Americans enjoy the benefits of universal telecommunications service.

And why is universal service so important to rural Americans? For the simple fact that it guarantees they will have access to the same economic, health, education and yes, even leisure benefits that are accorded all other American citizens. If not common sense, then this nation's Constitution clearly mandates such a guarantee. Rural Americans have the same responsibilities and thus the same rights as do their urban counterparts. In the information age in which we live today, advanced telecommunications are essential to fulfilling that guarantee. The REA telephone loan program ensures this objective is reached economically. So it is easy to see that this program benefits rural telephone subscribers, not rural telephone companies. Clearly affordable advanced telecommunications infrastructure can in no way legitimately be viewed as a luxury.

OFFSET
CAMERA COPY

REA'S DUAL MISSION

We have all heard critics of the REA telephone loan program point out that its work is complete because the vast majority of rural Americans receive at least basic telephone service. Yet what these critics consistently overlook is the fact that the program's mission is one of duality. Yes, our industry has arguably fulfilled its mission of providing basic telephone service to the majority of rural Americans. But that is only one half of the Rural Electrification Act's (RE Act) telephone loan program mandate -- to both furnish and improve rural telephone service.

And that is exactly what Rock Port and so many other rural telephone systems have been doing -- working in partnership with the REA to furnish and improve rural telephone service. In fact, small rural cooperative and commercial telephone systems like Rock Port are leaders in this regard. Such would not have been the case without our REA partner.

But it isn't just the RE Act's dual mission we are fulfilling for rural subscribers. Congress and the Federal Communications Commission have long advocated the installation and maintenance of a system of universal telecommunications service. Such a national network is essential to national defense, international competitiveness and global leadership. And again, our REA partner has played a central role in our ability to contribute to meeting this challenge. REA is continueing to help us through the Distance Learning and Medical Link Grant Program that became opeational in February.

THE RURAL DENSITY FACTOR

You may have noticed that I have repeatedly referred to "affordable advanced telecommunications services." There is a good reason for that. The provision and improvement of rural telephone service remains an extremely high-cost undertaking. Why? Because of the low density of subscribers in rural America. As I mentioned, in my cooperative's service territory we have a mere six subscribers per mile of telephone line. Conversely, urban areas will typically have at least ten times that number of subscribers per mile of telephone line. That simple fact says it all. Low density equates high cost. Without the REA's telephone loan program, many of the nation's rural citizens would be without telephone service of any grade today. Just another reason why our partnership with REA is so important to our success.

WITHSTANDING THE TEST

The debate surrounding the REA telephone loan program is nothing new and in fact dates to its creation decades ago. Nevertheless it is disheartening to see the accomplishments, and mission, of this premiere rural economic development program consistently distorted. Since late 1990, the REA telephone loan program has been subjected to the most prolonged and intense scrutiny probably ever faced by any other federal program -- despite its excellent record of achievement. In August of 1990, the Bush administration ordered the shut-down of the program, first in Indiana and then nationally. Thanks in large part to the efforts of this subcommittee, the program was eventually restarted but the temporary shut-down was the beginning of unprecedented unsubstantiated attacks on the program's credibility.

In 1991 and 1992 the Associated Press; nationally syndicated columnist James Kilpatrick; the Wall Street Journal and even CBS's *60 Minutes* leveled accusations against the program. The REA's own administrator even joined in the fray issuing the critical report *Return to the Mission*. In the midst of it all, Sen. Simpson (R-WY) and Reps. Solomon (R-NY), Santorum (R-PA) and Porter (R-IL) were busy fueling the fire, even though Congress was successfully discrediting every single one of the critical charges.

Unfortunately the cascade has not abated, and thus far in 1993 the Readers Digest; the Democratic Leadership Council's Public Policy Institute; ABC's *Prime Time Live*; and television's Crossfire have continued the barrage. It is clear the critics do not want to be illuminated about the role this program plays in maintaining the universal telecommunications infrastructure and the role it could play in the creation of so-called "information highways" that appear to captivate everyones' interest today. But what I find most amazing of all is the fact that not one of the critics will acknowledge the fact that this program, with its $10 billion dollar portfolio, has never lost a dollar. Such a feat is unique among federal credit programs.

CLINTON'S MIXED SIGNALS

Whether you are a Democrat or a Republican, I am convinced that deep in each of our hearts lies a real desire for President Clinton to succeed in his efforts to improve the national economy. Whether you believe the economy is suffering or not is beside the point. Americans believe there is always room for improvement. Nevertheless, no objective can succeed if its approach is flawed. Unfortunately, the rural telecommunications industry is concerned that this may be the case with regard to the President's economic initiative.

What am I talking about? Quite simply that the REA telephone loan program with its 44 years of effective, sound and economical experience is not being asked to play a leading role in the president's revitalization initiative. But even more important than that is the fact that by the president's own estimate, **the fiscal year 1994 savings of his proposal to raise the REA direct loan program's interest rate to Treasury's cost of money, is a paltry $7.5 million**. Yes that is real money to you and I, but when you consider the more than $4 billion the president is proposing for short-term economic stimulus spending, $7.5 million is a drop in the bucket -- and is not representative of sound policy.

APPROACH REA WITH SYMMETRY

Our industry recognizes the dilemma of the nation's spiralling debt. In fact we took the bold step 12 years ago of agreeing to freeze the REA telephone loan program's funding levels in an effort to help control this problem. The freeze has remained in effect in each of the succeeding years and today the industry is proud of the leadership it has displayed in this regard. If there were no other way, I am sure our industry would respond to the call again. But we can not shoulder the burden alone. It is imperative that Congress and the president remain cognizant of this industry's record, and of the role it should play in economic revitalization, as they move forward on the president's economic proposals.

Because advanced telecommunications, its financing, and the economic health of the nation are

all intertwined, it is imperative that the most effective REA financing system possible be in place for the benefit of rural subscribers into the next century. In this regard, Congress and the president must pay particular attention to the following issues:

* a substantial amount of low-cost capital must always remain available for the most high-cost hardship and emergency situations;

* program interest rates must remain affordable and should involve safeguard provisions to protect against the possibility of changing economic conditions that could lead to unaffordable rates;

* current program capital levels must be maintained to guard against the possibility of a future shortfall of alternative sources of capital, and;

* REA's staffing levels and technical and engineering expertise should not be compromised.

Finally, Congress and the president must never forget that the REA telephone loan program is one of the best jobs programs in operation. It creates thousands of jobs directly and hundreds of thousands indirectly. Some have even suggested the REA's technical and engineering standards division could be beefed up with technical professionals that are being displaced by the downsizing of the military industrial complex. The rural telecommunications industry would welcome an enhancement of this REA function which is so essential to the success of an integrated universal service network.
The REA telephone loan program also saves federal dollars in the areas of health care and education. By upgrading the nation's infrastructure we are ensuring the availability of interactive health and education links that in the long run save money.

RTB DILEMMA

One final and very important point about the REA telephone loan program cannot be overlooked. As you know, this program is comprised of REA direct loans, REA guaranteed loans and Rural Telephone Bank (RTB) loans. The three-tiered nature of this program is what makes it work. Unfortunately I must report to you today that one of those parts -- the RTB -- is not being allowed to function properly.

The problem I am speaking of is the manner in which the Federal Credit Reform Act of 1990 (FCRA) has been interpreted in its application to the RTB. For two years considerable confusion has existed as the extent to which the FCRA is applicable to the RTB. Ultimately, the administration with the concurrence of the House and Senate Budget Committees, determined that the RTB's imbedded low cost capital and repayments of principal and interest would be walled off from the RTB, preventing it from continuing to make loans at its cost of money as is mandated by the RE Act. The effect has been devastating.

Because the bank no longer has access to its own assets and equity (cash reserves and

outstanding principal and interest repayments) to fund new loans, it has been forced to borrow funds from Treasury to finance every new loan it approves. As you may have guessed, the result has been escalating interest rates. Despite the rising interest rates, the real travesty is the fact that the borrower's equity stock is also walled off and thus the bank is a bank in name only. Its future is uncertain and frankly we question how long it will remain viable should borrowers move to alternative sources of financing. It is time the Congress and the president addressed this issue. The RTB must either be fixed or liquidated. To render it ineffective and hold borrower stock captive any longer is wrong. It is as simple as that.

COORDINATION, COOPERATION, EDUCATION

The rural telecommunications industry is particularly concerned with the lack of coordination and cooperation that appear to be representative of federal telecommunications policy today. The courts, Congress and the administration and its agencies must remain abreast of one another's telecommunications policy activities and the telecomunications programs that are currently in place. In addition, these entities must also educate themselves about the industry for which they are setting policy. It is imperative that each understand the responsibilities and capabilities of rural telephone systems.

The majority of NTCA's members have infrastructure in place that is of a quality that it is capable of carrying out the linkage concepts (interactive education, health care, and business links) that are currently being advocated nationally. The only place problems typically arise are in allocation of the cost of installing last-mile feeds and identifying sources of financing for the end-users to install end-user equipment such as video screens and computer equipment. Once these two barriers are overcome, the capabilities of existing local exchange carriers are generally unlimited.

CONCLUSION

To conclude Mr. Chairman, let me just run through the main points of my message today. The REA telephone loan program's time is now. The program has a dual mission of providing and upgrading rural telephone service. Rural subscribers, not telephone companies, are the beneficiaries of the program. The low density associated with rural areas today is a key reason for the great need of low-cost REA capital. This program has withstood the test of time. It is ready to participate in the president's economic initiatives. Any changes or reductions in the program must be accomplished with symmetry. All facets of the REA telephone loan program must remain effective and operational, including the RTB. Coordination and cooperation and education are the only means by which we will maintain an effective universal telecommunications infrastructure.

Rural America in conjunction with the rural telecommunications industry can be our nation's future. Making efficient use of this industry's resources should be our highest priority. It is my sincere hope that Congress and the president will use our industry and its resources. We are ready willing and able. Thank you for your time and consideration. I would be happy to answer any questions.

RURAL TELEPHONE PROGRAM

WITNESS

THOMAS R. MINNICH, DIRECTOR, U.S. TELEPHONE ASSOCIATION

Mr. DURBIN. Thomas Minnich, U.S. Telephone Association. Welcome.

Mr. MINNICH. Mr. Chairman.

Mr. DURBIN. We are happy to make your statement part of the record and you may summarize it at this point.

Mr. MINNICH. Thank you very much, Mr. Chairman. I will summarize at this point.

My name is Thomas Minnich. I am President of Matanuska Telephone Association located in Palmer, Alaska. We serve some 32,000 access lines in an area approximately the size of the state of Ohio.

As a member of the United States Telephone Association, I present this testimony on behalf of the approximately 1100 member companies of USTA and the customers they serve.

The target assistance offered by a strong and viable REA remains essential for a healthy and growing rural telephone industry that contributes to the provision of universal telephone service. We appreciate the strong support that this committee has provided for REA since 1949 and look forward to a vigorous REA program in the future.

Based on extensive member experience with the program, USTA recommends that the United States adopt the following for the continuation of a strong REA telephone program that helps build rural America.

Set subsidies to support fiscal year 1994 REA and RTB telephone loans and guarantee programs no less than those levels approved for fiscal year 1993 and set the REA administrative budget at a level to ensure that adequate personnel and equipment are available to perform its statutory functions.

Rural utilities generally have higher costs than urban counterparts in order to meet universal service obligations. Rural customers demand and deserve facilities that provide a full menu of services and a quality of service that is equivalent to that received by urban customers.

To provide this service, REA borrowers need to invest in new technology. Just as technology is rapidly changing, so is the regulatory structure. Local customers are shouldered with an even greater share of telephone network expenses as a result of regulatory change. This trend is only going to continue.

The REA telephone program effectively targets assistance to rural customers. It keeps them on the network by allowing for reasonable phone bills and extends and modernizes that network for rural America. Without modernization of the rural infrastructure, economic growth will suffer and jobs will be lost.

The REA program is a volunteer public/private partnership that directly benefits rural people. Telephone companies and cooperatives act as conduits for service benefits between the Federal Government and the rural customers who are REA's intended beneficiaries.

The Government's contribution is leveraged by the equity, technical expertise and dedication of local telephone systems. Rural subscribers must receive telecommunications services at a cost and quality equal to those of urban subscribers. New services essential for rural economic development require infrastructure improvement.

Recognizing this, most telecommunications experts insist there will always be a need for the REA low cost capital. Recent studies by the Aspen Institute and the Office of Technology Assessment bear out the need for modernization of rural infrastructure and explain the significant benefits that will come from it.

Let us be clear: it is not the telephone companies that would suffer from a diminished REA telephone program. Service to rural America would suffer as a result if telephone company infrastructure does not keep pace with the rest of the nation. Lesser service in rural areas will result in lost productivity and economic stagnation.

Higher interest rates will discourage investment by telephone companies in high cost, low density rural areas and the new businesses that might have been attracted to rural areas by modern telecommunications infrastructure could possibly be lost.

Higher interest rates equal higher monthly bills. It is that simple. Low cost REA debt helps make modernization feasible while keeping rates affordable in rural America. Good telephone service is essential to rural America's infrastructure and yields enormous returns to the national economy by stimulating production, increasing employment, generating additional tax revenues and reducing the trade deficit.

Now when many rural areas need modern telecommunications to stimulate needed economic development, REA is more essential than ever.

R.E.A. telephone program staffing levels are at an all time low with only 139 employees in the now authorized 141 slots. The telephone program needs an adequate level of staffing to perform critical engineering and technical standards, financial analysis and loan administration functions. Many of those services are not available to small rural telephone companies.

We urge the committee to provide funding for telephone staff levels adequate to do the job.

Mr. Chairman, the REA telephone program with its flawless record of repayments costs amazingly little for the benefits received by this nation, assuring a strong and effective REA telephone program. By authorizing adequate loan levels and adequate staffing, we will retain the worthwhile partnership between REA, the telephone companies' rural consumers and that benefits all Americans.

Thank you.

Mr. DURBIN. Thank you, Mr. Minnich. Let me ask you a question or two.

Mr. MINNICH. Certainly.

Mr. DURBIN. First, frequently we hear the criticism levelled that larger telephone companies have bought the smaller companies and maintained them as subsidiaries and that these larger compa-

nies are benefitting from low interest loans through this program that were originally designed for small rural telephone companies.

The argument goes that these larger companies are certainly in a position to handle the credit needs without turning to this government program and asking for subsidized loans. I hear that frequently and I wonder what your response is to that.

Mr. MINNICH. My response would be that those companies that acquired those rural areas and those loans certainly still need that money to rebuild that infrastructure.

As the program goes forward, however, and those companies might ask for additional funds, then I think that should be looked at very carefully.

Mr. DURBIN. Let me ask you what would be the impact if we did move the interest rates on these loans closer to market rates and away from the subsidized interest rates that are presently available?

Mr. MINNICH. The impact on our company, my company, or rural America in general?

Mr. DURBIN. Well, if you could speak beyond your company, that would be fine.

Mr. MINNICH. Well, actually the impact would be several fold. As you probably know, small rural and independent small companies are being impacted from all sides today. Deregulation, competition, the law does not say all but small family owned or co-op companies. So as we are impacted from all those directions, now to add the burden of higher cost money can be very devastating to these companies. I would be concerned about many of the companies actually having to be sold.

And in most communities, the small telephone companies in those small towns are the core of that community.

Mr. DURBIN. What happens when they are sold?

Mr. MINNICH. What happens when they are sold is they are probably bought out by a larger conglomeration and then obviously rates will increase.

Mr. DURBIN. And how long did it take you to get here from Palmer, Alaska?

Mr. MINNICH. About 14 hours.

Mr. DURBIN. Well, I wish we could give you half a day to testify based on that long trip.

Mr. MINNICH. I just appreciate this opportunity.

Mr. DURBIN. We appreciate having you.

Mr. MINNICH. Thank you.

Mr. DURBIN. Thank you very much for joining us.

[The information follows:]

Statement
of
THOMAS R. MINNICH
Director
UNITED STATES TELEPHONE ASSOCIATION
before the
U.S. HOUSE OF REPRESENTATIVES
Appropriations Subcommittee
on Agriculture, Rural Development,
Food & Drug Administration
and Related Agencies
March 23, 1993

SUMMARY OF REQUEST

PROJECT INVOLVED: Telephone Loan Programs Administered by the Rural Electrification Administration.

ACTIONS PROPOSED: Subsidies to Support a Continuation in FY 1994 of not Less Than the FY 1993 Loan Levels for the REA and RTB Loan and Guarantee Programs with Funding for Adequate Staffing to Administer the Program.

OPENING REMARKS

Mr. Chairman and Members of the Subcommittee, I am Thomas R. Minnich, President of Matanuska Telephone Association in Palmer, Alaska. I appear before you as a representative of the United States Telephone Association (USTA). USTA represents over 1100 local telephone companies that provide over 98 percent of the access lines in the United States. USTA members range from large publicly-held corporations to small family-owned companies and cooperatives owned by their customers. I present this testimony in the interests of the members of USTA and the customers they serve.

Local telephone companies are dedicated to fulfilling two goals: serving the nation's telecommunications needs and maintaining universal service at reasonable rates. USTA members, both large and small, firmly believe that the targeted assistance offered by a strong and viable telephone loan program remains essential in order to maintain a healthy and growing rural telephone industry that contributes to the provision of universal telephone service. We appreciate the strong support this committee has provided for the telephone program since its inception in 1949 and look forward to a vigorous program for the future.

RECOMMENDATIONS

USTA recommends funding for the telephone loan program loan levels in fiscal year 1994 at not less than the loan levels in fiscal year 1993. In addition, we request that the REA administrative budget be set at a level that ensures the availability of adequate personnel and equipment to perform its statutory functions.

The need for funding continues to be great. At the beginning of fiscal year 1993, REA had on hand over $220 million in completed loan applications. As of March 5, 1993, REA had approved over $134 million in REA and RTB loans while completed applications grew to approximately $280 million. So with half the fiscal year still to go and loan applications still coming in, the known current demand for REA and RTB loans already equals the total fiscal year lending authorization. This amount of applications attests to the continuing need for the REA Telephone Program.

We understand the budget constraints Congress must face, but the Administration's fiscal year 1994 proposal for REA threatens our ability to adequately serve the nation's telecommunications needs and to maintain universal service. The ratemaking process employed by state utility commissions reflects a company's cost of capital in the rates charged for service. Higher interest rates equal higher monthly bills -- it's that simple. Low cost REA debt helps make modernization feasible while keeping rates affordable in rural areas.

A CHANGING INDUSTRY

The telephone industry is in the midst of one of the most dramatic changes any industry has ever undergone. Both the technological underpinnings and the regulatory atmosphere are much different than they were just a few years ago. Without system upgrades, rural areas will be left out of the emerging information revolution. This will impact not only rural Americans, but people in urban areas that need to communicate with those in rural areas.

As the need for new services evolves, rural telephone systems must have access to low cost REA financing to fund technological improvements such as:

- digital switching equipment;
- updated switch software to provide advanced services and communicate with discrete signalling networks;
- broadband fiber optic lines; and
- emergency services such as enhanced 911.

The intelligence required for many of the emerging new services resides at a high level in the national public telecommunications network. Rural telephone companies must have the advanced capability required to communicate with these intelligent network elements.

Just as technology is rapidly changing, so is the regulatory structure of telecommunications. Increasing competition is forcing a trend towards cost based pricing. Local residential customers now shoulder a greater share of telephone network expenses. Rural areas tend to face higher costs, because the customer base is smaller and distances are greater between customers. The REA telephone program targets assistance to these rural telephone customers. It keeps them on the network by allowing for reasonable phone bills and extends and expands that network in rural America to meet the future needs of these customers.

THE REA TELEPHONE LOAN PROGRAM AIDS RURAL DEVELOPMENT

In the information age in which we live, it is essential that rural subscribers receive telecommunications services of a cost and quality equal to those of urban communities. New telecommunications services, essential for rural economic development, require infrastructure improvement through the deployment of new technology. Recognizing this, industry and government telecommunications experts alike insist there will always be a need for REA's capital, as well as its technical standards advice. Recent studies by the Aspen Institute and the Office of Technology Assessment bear out the need for modernization of the rural infrastructure and explain the significant benefits that will flow from it.

A 1990 study by MESA Consulting entitled, *"Telecommunications and Rural Economic Development"*, concluded that an advanced telecommunications infrastructure attracts new businesses, makes existing businesses more competitive, and enhances the quality of life through provision of essential social services. The study, placed on the record by USTA in NTIA's Infrastructure Proceeding, confirmed that modern telecommunications services are an essential part of rural America's infrastructure and yield enormous returns to the local and national economy. Telecommunications expands production - agricultural, manufacturing and services - thereby reducing the trade deficit, generating additional Federal, state and local tax revenues, and stimulating employment. Now, when rural areas require a modern telecommunications infrastructure to stimulate vital economic development, REA is needed more than ever.

Without modernization of the rural infrastructure, economic growth will suffer and jobs will be lost. Borrowers employ nearly thirty thousand rural Americans in their businesses directly and benefit hundreds of thousands indirectly. REA loans have a multiplier effect - the minimal amount of REA "seed" dollars stimulates business activity and creates jobs, thereby generating Federal, state, and local revenues.

REA HELPS RURAL AMERICANS

The REA telephone program benefits America. The program is a public-private partnership in which the borrower telephone systems are the conduits for benefits from the federal government to rural telephone customers, the true beneficiaries of the REA program. The REA telephone program is totally voluntary. Companies that borrow do so to expand their customer base and modernize their network in order to improve service to their customers. The government's contribution is leveraged by the equity, technical expertise and dedication of local telephone companies and cooperatives.

In its 44 year history, the REA telephone program has never had a default. The program costs amazingly little for the benefits the nation receives. Perhaps most importantly, it is an established and effective program to modernize the rural telecommunications infrastructure so necessary if this nation is to have universal availability of advanced telecommunication service.

Let's be clear, it is not the telephone companies that will suffer from a diminished REA telephone program. Service to rural America will suffer as a result of a telecommunications infrastructure that does not keep pace with the rest of the network. The nation will suffer the consequence of lesser telecommunications service in rural areas through lost productivity, lost jobs, a loss of potential development and economic stagnation.

Higher REA interest rates will discourage investment in high cost, low density rural areas. Telephone companies, and in particular those that rely on private capital markets, must seek to maximize their return. They cannot afford to borrow money to modernize areas that will not generate enough additional revenue to repay the debt and earn a reasonable return. As evidence of this, we're presently seeing a number of companies that rely on the private capital markets divesting themselves of rural exchanges.

Therefore, it is likely that if low cost funds are unavailable through the REA telephone program, many rural customers will be unable to afford to pay the cost of information-age services. Higher costs may drive up access rates charged to long distance carriers, thereby threatening geographically averaged long distance rates - one of the key industry structures that supports universal service.

REA IS NEEDED MORE THAN EVER

Proposals to diminish the REA telephone program come at a time when it is increasingly clear that advanced telecommunications can overcome the rural disadvantages of long distance and low density and provide modern and high quality medical, business, educational, information and entertainment services to rural

Americans. They come at a time when rural Americans continue the struggle to revitalize their stagnant economies. In light of the fact that Congress, government agencies and independent studies have indicated that telecommunications enhancement is a significant part of rural economic development, affordable capital to finance technological upgrading is needed now more than ever before.

We are puzzled, Mr. Chairman, at a proposal that funds be invested in an "information highway" while essential REA low cost capital is proposed to be eliminated. Rural telephone companies provide "the last mile of line" to the rural farm, ranch, business or home, that is essential if an information highway is to reach the Americans that need it most.

The government cannot afford to eliminate the only low-cost assistance it provides to help meet rural communities' telecommunications needs. REA is one of the few government infrastructure programs targeted to America's rural citizens. It has brought social and economic benefits to rural parts of the nation which, particularly in recent years, have suffered severe economic hardship.

REA STAFFING MUST BE ADEQUATE

REA telephone program staffing levels continue at all-time low levels with only 139 employees based on an authorized staffing level of 141. In 1982, the REA telephone program had 212 employees. Only two years ago, it had 149 employees based on an authorized staffing level of 154. The Telephone Program needs an adequate level of staffing to perform critical engineering and technical standards, financial analysis and loan administration functions. We urge the committee to provide funding for staff levels adequate to do the job.

CONCLUSION

Mr. Chairman, assuring a strong and effective REA Telephone Program through authorization of adequate loan levels will retain the worthwhile partnership between REA, telephone companies and rural consumers to the benefit of all Americans. Thank you.

RURAL WATER PROGRAMS

WITNESS

GARY KING, NATIONAL RURAL WATER ASSOCIATION

Mr. DURBIN. The next witness is Gary King, from the National Rural Water Association.

I am told Mr. King is from Illinois and I know it does not take 14 hours with good weather to get from Illinois.

Thank you for joining us today.

Mr. KING. Thank you, Mr. Chairman.

Mr. DURBIN. Your statement will be made part of the record and if you would like to highlight or summarize at this point, you are welcome to do so.

Mr. KING. Thank you. I am Gary King from the good state of Illinois and I manage a water system, a wastewater system, in a small community of about 3000 with about 1200 customers in Leroy, Illinois.

I would like to thank you, Mr. Chairman, for the opportunity to testify before this subcommittee today. I am testifying for the National Rural Water Association as well as the Illinois Rural Water Association. We want to thank you for the action taken by this committee last year to support the RDA, rural water and sewer grant and loan program and for the increase of $281 million in grants and $470 million in loans in President Clinton's economic stimulus package that was approved by the House last week.

This program is the most important infrastructure, economic development and health protection program in our small rural communities today.

These two recent increases in funding have assisted significantly in meeting the growing needs in rural areas to meet the new EPA and RDA federal and environmental requirements. Without these funds, many more small water systems would be in serious jeopardy of not meeting the regulations under the federal Safe Drinking Water Act.

For example, in Illinois this past year, there were 17 systems that received grants in the amount of $9 million and 27 systems that received loans in the amount of $9.2 million. Nationally, there were 628 systems that received approximately $354 million in water and sewer grants and 859 systems that received $600 million in water and sewer loans, all for priority small community projects.

The applications for funding small systems are twice these amounts. According to RDA, there are 1261 unfunded application requests for water and sewer loans totalling $1.2 billion and 703 unfunded grant application requests totalling $600 million. And more application requests are expected.

As a result, we are requesting a level of $600 million for the grant program and $900 million for the loan program next year. As budget and resources continue to shift from the defense area to domestic programs, we urge the committee to continue to consider the importance and effectiveness of the small community water and sewer grant and loan programs in rural America.

The other request we have today is for continued funding of the circuit rider program at a level of $4.5 million. The Illinois circuit

rider program provided 451 on-site technical assistance visits to water systems throughout the state last year, the size of my community and so on. For over 80 percent of these people, this was the only training and technical assistance they received. Yet study after study indicates that it is the small system with limited budgets and part-time operators that have the greatest need for assistance in order to comply with increased federal environmental requirements. The circuit rider program meets this need.

Nationally, circuit riders made over 26,000 technical contacts with small community water systems in 48 states. The list of the number of technical assistance visits in each state is attached to our written testimony. An article in the National Small Flows Clearing House newsletter "On Tap" noted, "If you talk to small system operators who have received the assistance of a circuit rider, you will find that few, if any, have anything but praise for the circuit rider and the program that makes their services possible. In fact, the only complaint we have heard is there are not enough circuit riders to go around."

In closing, let me thank you again for your help in funding RDA water and sewer and circuit rider programs. The 48 state rural water associations and the over 51,000 small water systems want you to know how appreciative they are for the work of this committee.

Mr. DURBIN. Thanks, Mr. King. Do you know what the default rate is on the loans to rural water systems?

Mr. KING. Less than 1 percent.

Mr. DURBIN. I thought that was the case. Someone came in to tell me that this is a pretty good loan program for the Federal Government.

Mr. KING. It certainly is.

Mr. DURBIN. Tell me this, too. The President argued and some people disputed the fact that these water and sewer grants were good economic stimulus. He argued that it created some jobs for construction and it also was the key in many communities to keeping people in good water supply and attracting more homes and businesses. What has your experience been?

Mr. KING. Absolutely. I happen to be in a very good situation but neighboring towns on both sides of me, one of them without a $400,000 grant, they were sitting there dying, their water system was—they did not have a water system. They had water coming out of the ground, add a little fluoride and chlorine to it. And now they are going to survive. The neighboring town ten miles east of me is about the same size as my community and they have continually defeated, the community has, of not upgrading their water system because of the cost. But if they were able to obtain a low interest loan or a grant, I am sure that they could get this off the ground. And it would help jobs very much so.

Mr. DURBIN. When these grants do come through and construction takes place, I take it there will be some local people working on these projects? Has that been your experience?

Mr. KING. Absolutely. Yes. The neighboring town of Downs, Illinois, there are firms—they use community help whenever they possibly could.

Mr. DURBIN. Good. Thank you for your testimony, Mr. King. Glad to have you here. I have some friends from Leroy and I am glad to have you as part of our testimony this year.

Mr. KING. Thank you.

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NATIONAL RURAL WATER ASSOCIATION

Statement of

Gary King

Board Member, Illinois Rural Water Association on behalf of the National Rural Water Association

before the

Subcommittee on Rural Development, Agriculture, and Related Agencies
House Appropriations Committee
Washington, D.C.

March 23, 1992

Mr. Chairman, thank you for allowing me, as Board Member for the Illinois Rural Water Association to appear before your Committee today. The Illinois Rural Water Association has a membership of 486 water systems. I am here on behalf of the National Rural Water Association (NRWA), as well as the Illinois Rural Water Association and rural water folks all over this country to thank you for the generous and very important increase given the rural water and sewer grant program last year. We also want to thank you for the $281 million in grants and $470 million in loans in President Clinton's Economic Stimulus Package that was approved by the House last week. These funds are being used and will be used to great advantage by many small water systems to improve people's health, strengthen local economic opportunity and assure that rural America stays strong. Finally we want also to express our deepest appreciation for the help of the Committee in providing an increase in our rural water circuit rider program last year which has enabled us to strengthen the program in all states. We are here today to request the continued support of you and the Committee for these two very important rural programs and for the recently established rural wastewater Circuit Rider.

Specifically, we are requesting:

- funding for the RDA rural water and sewer grant program at $600 million and the loan program at $900 million

- funding for the Circuit Rider technical assistance program at $4.5 million to allow for a more intense use of circuit riders in areas of the country affected by the most serious environmental problems.

Our primary reason for supporting additional funding in the water and sewer grant and loan program is the growing recognition that water and sewer services are a basic element to rural development in this country. As environmental and health expectations rise, the need for safe and clean water has become a necessity for rural residents. Community water systems provide this service. RDA grants and loans allow those residents to build systems and to repay the loans over an extended period. Without the current assistance from RDA, most rural residents could not initiate the construction of new systems and the expansion of existing ones. Additional funding will allow more rural Americans the opportunity to have access to a safer water supply.

We are very aware that without the support of this Committee, that the program would not be operating today. It is impossible to overestimate the debt that rural America owes you and this Committee for standing firm for rural water over the past ten years.

The importance of the RDA grant and loan funds grows each year as the Federal government presses for higher and higher environmental standards on small water systems. The goal of RDA has always been to bring safer drinking water to rural residents. However, now EPA has strengthened its role through both the Safe Drinking Water Act (SDWA) regulations and the deadline on compliance with the Clean Water Act. New regulations on Surface Water Treatment, Lead and Copper testing and the listing of 25 new contaminants this year are slowly overwhelming many small systems.

These federal requirements are dramatically increasing the cost of managing rural water and rural wastewater systems. In response, small communities have gone to their state governments for help and in some cases have received new resources. However, in these and other cases it would be impossible to gain new financial support without the critical "seed money" that the RDA grant funds provide for projects in low income areas of each state. These grant funds are highly leveraged and the increase in the grant program is having a multiple impact on the improvement of small water and sewer systems throughout the nation.

This funding is vital to most small water systems because rural water districts do not have the legal standing to float bonds, levy taxes or seek other types of public financing. Private financing as a sole source has seldom been an alternative because of its high cost and consistent unavailability. With a repayment rate on RDA water and sewer loans of over 99%, this is the soundest government loan assistance program in the nation.

The Environmental Protection Agency (EPA) continuously cites the RDA rural water and grant loan program as the major source of funding assistance to help small rural systems meet SDWA requirements. During Congressional testimony, a question to EPA received the following response:

> The Agency has met with the RDA in an effort to ensure that adequate financial support is and will continue to be available to small water systems to meet additional requirements imposed by the Safe Drinking Water Act.

This is of particular importance in that the cost to small water systems for SDWA compliance is estimated at $8 billion over the next twelve years. While much of this cost will be borne by the small water system customers themselves, the RDA program is the catalyst to generate the necessary funding. In effect, we have one federal agency imposing regulatory requirements and relying on another agency (RDA) to provide funds to support compliance. It is in rural areas which the RDA grant and loan program is critical to SDWA compliance.

The second area of our concern is the assistance available to help improve the operation and maintenance of existing rural water systems. Most rural water systems were developed because neighbors got together and decided that something had to be done about their collective poor quality or lack of water. These people formed water districts, signed up customers, borrowed funds from the only source available - RDA - and set up a small water system operation with part-time personnel.

These systems are as varied in their size and structure as rural America itself. Many have grown from a few hundred households to several thousand. Many older systems are having serious operational problems with old and worn out water systems. The common problem among these systems is the need to improve the quality of the water while continuing to provide water in the most cost effective manner possible.

What has evolved from this need is the rural water circuit rider technical assistance program now

operating in forty-eight states, thanks to the action of this Committee last year. A full-time rural circuit rider, working under the oversight of each state rural water association, is available to provide hands-on assistance and guidance to all rural water systems in every state regardless of size or problem. This has allowed many rural systems to steadily improve the efficiency of their operation and the quality of the water delivered. In 1992, the Illinois Circuit Rider program assisted rural water systems with 451 technical assistance contacts - an average of 38 technical assistance contacts per month. Approximately one half of the contacts were made in response to direct calls for help from water system personnel. Circuit Riders have saved significant amounts of money in preventing water loss, reducing the need for replacement of pipes, pumps and other equipment and in working with systems to set adequate water rates in order to provide funds for continuous preventive maintenance. Often these savings are used to reach new customers or make improvements required by the SDWA.

During the past year, the Circuit Riders have made over 26,000 on-site types of technical assistance to rural water systems throughout America to provide hands-on help. The new state circuit riders in the additional states have expanded their activities. We believe that having a national border-to-border program is having a dramatic impact on the upgrading of small water systems in those areas with the most serious water problems.

In another area, we support the continuation of the solid waste technical assistance program at last year's level. We also urge that the program be available for organizations working within one state where there would be the most effective method for strengthening rural solid waste management programs.

Finally, we would appreciate your assistance in protecting small systems under FmHA 1926(b). If possible, we would like to have the FmHA 1926(b) provisions extended to protect rural water systems with RDA grants as well as those with only RDA loans.

One special request we are making is that you consider increasing the funding for the circuit rider program to $4.5 million a year to provide for circuit riders in high environmental risk areas and to Alaska and Hawaii. The SDWA requires small water systems to test for over eighty new contaminants over the next three years. Circuit Riders have been the primary assistance available to the smallest and most out-of-compliance rural systems.

In closing, we want to again thank you for your past support of rural water and to urge you to increase the funding level for the RDA rural water loan program to $900 million, increase the RDA rural water grant program to $600 million and provide $4.5 million for the Circuit Rider program.

CIRCUIT RIDER TECHNICAL ASSISTANCE FOR 1992
RDA/NATIONAL RURAL WATER ASSOCIATION

STATE	PROGRAM NO.	TOTAL CONTACTS
ALABAMA	1	546
ARIZONA	1	408
ARKANSAS	1	631
ARKANSAS	2	523
CALIFORNIA	1	458
COLORADO	1	557
CONNECTICUT	1	422
CONNECTICUT*	1	36
DELAWARE	1	439
FLORIDA	1	609
GEORGIA	1	436
IDAHO	1	438
ILLINOIS	1	451
INDIANA	1	463
IOWA	1	561
KANSAS	1	559
KENTUCKY	1	622
KENTUCKY	2	450
LOUISIANA	1	439
LOUISIANA	2	527
MAINE	1	440
MARYLAND	1	411
MARYLAND*	1	36
MICHIGAN	1	470
MINNESOTA	1	452
MISSISSIPPI	1	616
MISSISSIPPI	2	680
MISSOURI	1	430
MONTANA	1	526
NEBRASKA	1	572
NEVADA	1	440
NEW JERSEY	1	522
NEW MEXICO	1	579
NEW YORK	1	444
NORTH CAROLINA	1	469
NORTH DAKOTA	1	523
OHIO	1	463
OKLAHOMA	1	455
OKLAHOMA	2	449
OREGON	1	515
PENNSYLVANIA	1	546
SOUTH CAROLINA	1	503
SOUTH DAKOTA	1	485
TENNESSEE	1	657
TENNESSEE	2	592
TEXAS	1	484
TEXAS	2	508
UTAH	1	560
VERMONT	1	511
VIRGINIA	1	466
WASHINGTON	1	435
WASHINGTON*	1	26
WEST VIRGINIA	1	477
WISCONSIN	1	468
WYOMING	1	504
Total:		26295

* Temporary Circuit Rider due to State Affiliate Circuit Rider vacancy

HOUSING AND FOOD PROGRAMS

WITNESS

RANDALL McCAIN, AMERICAN ASSOCIATION OF RETIRED PERSONS

Mr. DURBIN. Randall McCain from the American Association of Retired Persons. Welcome, Mr. McCain.

Mr. MCCAIN. Mr. Chairman, my name is Randall McCain, Arkansas State Housing Coordinator for the American Association of Retired Persons.

Mr. DURBIN. Arkansas is everywhere.

Mr. MCCAIN. I am the former Rural Housing Chief of the United States Farmers Home Administration in Arkansas, as well as the former director of the State Office on Aging.

On behalf of AARP, I want to express our appreciation for this opportunity to testify.

The Association continues to be concerned about the situation of rural older people. Some of the nation's most persistent economic, housing and health problems are concentrated among this population.

One program of particular significance to low income older Americans is the Section 504 very low income home repair grants. The appropriation level has been frozen at 12 and a half million for the past several years. Section 504 grants are targeted to the elderly poor and make existing housing livable with modest repairs or renovation.

In 1980, more than 8000 low income older households were assisted by this crucial program, a number that shrank to 3678 last year.

The Farmers Home Administration reports that at the end of the fiscal year 1992 a backlog of over 6935 eligible applicants were waiting for Section 504 repair grants. The additional resources requested by the president in the supplemental appropriation bill pending before Congress and passed yesterday at least by the House would reduce this backlog by about one-third if they funded it at the level he requested.

To the extent additional funds are available, Mr. Chairman, the association recommends an appropriation sufficient to eliminate the backlog of Section 504 grants.

We also recommend that the Section 504 loan program, which is similarly underfunded, be significantly increased.

Thank you again for the opportunity to testify today. We look forward to working with you to improve the lives of rural Americans of all ages.

Mr. DURBIN. Mr. McCain, thank you.

There are not enough people who come to this town and speak for poor people. A lot of folks that have some money can find some folks to come and speak for them, and I appreciate you for doing it.

Mr. MCCAIN. Mr. Chairman, this thing is real close to my heart. I was a county supervisor for a long time with the agency and the 504 program is the type of thing—it takes a lot of effort to work these things up because you are dealing with people that you almost have to go out and find them. People that stay in their home and need minor repairs.

I guess one of the most rewarding experiences of my work with Farmers Home was with 504 people. I really enjoyed it.

Mr. DURBIN. I will tell you this, because of the feelings of our Secretary of Agriculture there was money included in the stimulus package for this. You certainly have a fine champion there. I am sure he is going to do his level best to help in this area and we all know it is needed.

Mr. MCCAIN. Thank you very much.

Mr. DURBIN. Thank you.

Mr. Peterson, do you have any questions?

Mr. PETERSON. No, thank you.

Mr. DURBIN. Thank you for joining us.

Mr. MCCAIN. I appreciate it.

[The information follows:]



Bringing lifetimes of experience and leadership to serve all generations.

STATEMENT

OF

THE AMERICAN ASSOCIATION OF RETIRED PERSONS

ON

APPROPRIATIONS FOR THE DEPARTMENT OF AGRICULTURE
FOR FISCAL YEAR 1994

PREPARED FOR THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

MARCH 23, 1993

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Lovola W. Burgess *President* Horace B. Deets *Executive Director*

Mr. Chairman, I am Randall McCain, Arkansas State Housing Coordinator for the American Association of Retired Persons (AARP). I am also the former rural housing chief of the Farmers Home Administration in Arkansas as well as the former Director of the State Office on Aging. AARP appreciates this opportunity to testify before you today. Reflecting the Association's concern with the housing and economic circumstance of rural older people, our recommendations may be summarized as follows:

- Substantially increase funding for the Section 504 home repair grant program;
- Increase funding for the Section 515 rental housing program with special emphasis on congregate facilities for the frail elderly. Provide funding for services coordination in projects serving significant numbers of frail older or disabled persons;
- Provide funding for the migrant/homeless program; and
- Fund the Food Stamp Outreach program at the $5 million authorization ceiling.

POVERTY AMONG RURAL OLDER PEOPLE

Some of the nation's most persistent economic, housing, and health programs are concentrated in rural areas among older people. In 1990, older people living in nonmetropolitan areas had a poverty rate of 16.1%, compared with 8.1% for those living in the suburbs and 14.6% for those living in central cities.

Economic problems are particularly severe among older rural minorities and women living alone. When these factors are combined, poverty is nearly universal. In 1987, 80% of older black women living alone in rural areas had incomes below the poverty line. Among all rural blacks, the poverty rate in 1990 was 46.5%. Especially hard-pressed by rural poverty is the southern U.S., where the nine states with the highest rate of poverty for older people are all located.

In addition to problems associated with low incomes, older persons in rural areas have much less access to needed services. The lack of services in rural areas has driven too many older people to giving up their homes to relocate to areas and facilities where services are available.

The Association urges special attention to the plight of older migrant and seasonal farmworkers. Working and living conditions, which are generally bad for farmworkers of all ages, are abysmal for older farmworkers. Earnings for farmworkers over age 65 who are engaged exclusively in farmwork averaged only $3227 in 1987, and many receive no Social Security or other benefits. Not surprisingly, farmworkers often experience problems

characteristic of the elderly before reaching their fiftieth birthday. Disability levels are high -- 44.5% of farmworker

families include a disabled member according to one federal study. Unfortunately, access to needed services has often been blocked by prejudice, language barriers, and a lack of outreach.

To address the problems associated with poverty among rural older people, our recommendations will focus on two areas under the jurisdiction of this Subcommittee: rural housing and food stamp outreach.

RURAL HOUSING

One result of high rates of rural impoverishment is a striking concentration of housing problems among rural older people. Data from the 1987 American Housing Survey indicate that 45% of older people living in severely inadequate housing reside in rural areas, though only 16% of all older households live in rural areas. In all, 13% of all nonmetropolitan housing units occupied by older people in 1985 were substandard.

Despite the record of success of Section 504 home repair grants, funding cuts have substantially reduced the number of households served each year. In 1980, over 8,000 older families were assisted by this program, a number that shrank to 3,678 in 1992. The Farmers Home Administration reports that, at the end of FY 1992, a backlog of over 6,935 eligible applicants were waiting for Section 504 grants, a number roughly twice that which can be served at the current funding level. The additional resources requested by the President in the supplemental spending bill pending before Congress will reduce the current backlog by about one-third.

While we recognize the constraints imposed by the budget agreement, AARP urges the Subcommittee to provide a substantial increase over the current funding level for Section 504 grants. The Section 504 loan program should be similarly increased to a level sufficient to match the grants.

A June 1990 FmHA survey indicated that there were roughly four times as many applications for Section 515 housing as could be funded, indicating the degree of unmet need in rural areas. AARP recommends that funds for this program be increased, with stronger priority given to serving previously underserved areas and populations such as older farmworkers.

Congregate facilities, created both in new projects and through retrofitting of existing projects, should especially be encouraged. Because of the scarcity of social services in many

rural communities, congregate housing programs that provide nonmedical services such as meals, housekeeping, and transportation can be especially crucial to the independence of frail older people in rural areas. Unfortunately, since the Farmers Home program finances only the capital costs of constructing facilities, the lack of services and management personnel continues to present obstacles to expanding the FmHA congregate housing program. We strongly urge the Subcommittee to provide funding for services coordination in facilities serving significant numbers of frail older or disabled persons. We also urge the Subcommittee to seek a plan of action from the Secretary for utilizing programs under the jurisdiction of the Department of Agriculture -- such as FmHA community facilities, nutrition, homemaker, transportation, and other programs -- and other agencies to facilitate services provision in congregate projects both to residents and to older people in the surrounding community.

Finally, AARP urges greater attention to programs providing affordable housing to remote rural areas and areas with large concentrations of underserved populations such as older and disabled farmworkers. We support the set-aside of funds for remote rural areas as included in the Housing and Community Development Act of 1992. In addition, the Association supports funding for the program for migrant workers and rural homeless people. Migrant workers tend to be older than other farmworkers and are more likely to be minorities with extremely low incomes.

FOOD STAMP OUTREACH

The low incomes received by many rural older people not only result in housing problems, but also in a reduced ability to purchase adequate food to maintain a healthy diet. Because diet is crucial to the maintenance of good health, persons with low incomes must have improved access to Food Stamp benefits.

Outreach is needed to inform potential recipients of their eligibility for Food Stamps and to assist them in completing application forms. The social and physical isolation of rural older people makes outreach difficult but all the more essential in rural areas. Food Stamp participation rates are low among rural people, in part because they lack information about the program and in part because of their distance from food stamp offices. A 1984 study by the U.S. Department of Agriculture (USDA) found that 27% of non-participants lived more than nine miles from the nearest office; 31% of non-participants indicated that getting to the food stamp office was a "big problem." GAO (1988) reported that 51% of eligible non-participants did not apply for food stamps in 1986 because they perceived themselves as being ineligible.

A pilot program initiated by AARP in 1990 demonstrates that Food Stamp Outreach can make a big difference in linking eligible low-income older people with needed benefits. As a result of stationing eligibility workers at one senior center in Memphis, 113 new applications were filed. A three-hour phone-a-thon in Cleveland produced inquiries from 400 people, the majority of whom were referred to the local Food Stamp office. Bilingual/bicultural workers and materials were successfully used to reach rural, older Hispanic families in Las Cruces, New Mexico. The evaluation of AARP's rural outreach project revealed important information about the complexities of outreach in rural settings, particularly in the areas of information dissemination, target populations, relative poverty differences, the impact of various outreach techniques, and availability of volunteers.

AARP strongly urges the Subcommittee to fully fund the Food Stamp Outreach program next year at its $5 million authorization ceiling. A relatively small amount of money for this program can make a large difference in the lives of families with low incomes.

Thank you again for the opportunity to present our views on rural housing and food stamps. We look forward to working with the Subcommittee to improve the lives of rural Americans of all ages.

RURAL DEVELOPMENT PROGRAMS

WITNESS

ALICEANN WOHLBRUCK, EXECUTIVE DIRECTOR, NATIONAL ASSOCIATION OF DEVELOPMENT ORGANIZATIONS

Mr. DURBIN. The next witness is Aliceann Wohlbruck, National Association of Development Organizations. Glad to have you here today. We have your statement. We will make it part of the record, if you would like to summarize at this point.

Please proceed.

Ms. WOHLBRUCK. My name is Aliceann Wohlbruck and I am Executive Director of the National Association of Development Organizations and I appreciate this opportunity to testify on behalf of our members.

Our members are regional development organizations in rural counties and small communities and they are known as economic development districts, regional planning commissions in Illinois, regional planning commissions in Florida and different names in different states. And they are public institutions that work with local governments and the private sector to improve economic opportunities and the quality of life, particularly in rural areas.

I have included with my testimony a couple of documents that I hope you will find useful as you consider funding for the 1994 fiscal year. One is "Revitalizing Rural and Small Metropolitan American," a paper we gave to the Clinton transition people, and another study, "Rural America, Worth the Investment". That includes the results of a survey of over 1000 rural elected officials in regional development organizations. And I also included a one-page summary on a survey of Illinois rural officials that I thought might be particularly interesting to you, Mr. Chairman, on what their priorities on needs are.

Mr. DURBIN. It is just nothing short of amazing, the references to Illinois already this afternoon.

Ms. WOHLBRUCK. You had better look out for Illinois, right?

Mr. DURBIN. It is certainly music to my ears.

Please proceed.

Ms. WOHLBRUCK. So I wanted to thank you and other members of this subcommittee because our funds have been cut 70 percent in the last 12 years if you look overall at all the programs for rural development and this has been a stalwart supporter, this subcommittee, and we appreciate it very much, the staff and the members.

Just a reminder that 62 million people live in rural America. That is 205 percent of the U.S. population and that is roughly equal to the number of people who live in the nation's inner cities. But the problems of rural and small town America go largely unnoticed by the media and that is why your kinds of programs that you have jurisdiction over are so important.

Our members urge you to continue support for the Rural Development Administration's programs that have been outlined here, the water and sewer and business and industry.

In the survey that we did in December 1992, 70 percent of rural officials said that infrastructure is their number one concern, 47

percent identified economic development and 18 percent listed solid waste and other environmental issues.

We support the President's rural development initiative that requests increases in water and wastewater loans and grants and community and business assistance. And we are also very supportive of the state rural development council initiative. It seems to be working and putting programs together at the state level.

We are concerned about one provision in the president's Vision of Change for America. He calls for the intermediary relending program to be targeted to small emerging micro enterprises. Our studies show that there are a wide array of small businesses in rural areas that need financial assistance and restricting the funding to micro enterprises will limit the program's applicability in many rural areas.

In our survey, rural officials identified inflexibility as one of the greatest impediments to their use of federal programs, so we think restricting IRP program money to micro enterprises is an unnecessary restriction although they are already eligible and we would like to see that program continued as it is.

In addition to funding for the administration's rural initiative, we would like the subcommittee to provide $15 million for the Section 111 planning and technical assistance program.

Currently, USDA provides no funding to help rural communities with long-term development strategies or to implement technical assistance programs to improve their local economies.

Section 111 which was last funded in 1981 provides resources to implement locally identified development strategies. From small business export development to tourism development and fire protection, there is much to be done in rural development but very few resources and we believe that funding for Section 111 could provide much needed assistance for small towns and rural counties to develop a long-term vision and plan for their future.

Another very top priority for rural officials is solid waste technical assistance. In August 1990, our members identified solid waste management as the top priority facing them and so we supported Section 2325 of the 1990 Farm Bill that created a regional solid waste management grant program. Last year, Congress funded this program at $3 million.

A 1992 survey of rural governments has revealed that 45 percent of the rural governments responding are planning to close their landfills in the next year because they cannot comply with the new federal landfill regulations under the Research Conservation and Recovery Act or RCRA.

Many rural governments are working together to develop regional answers to their solid waste disposal needs and experts agree that a regional approach is the most cost efficient strategy to address solid waste disposal. So our association would request that the subcommittee fund the solid waste regional technical assistance program at $25 million in fiscal 1994 to help rural governments develop appropriate strategies to address the future solid waste management needs.

Again, Mr. Chairman, I thank you for letting us come to testify and for your past support and I would be glad to answer questions.

Mr. DURBIN. This solid waste disposal is one of the hottest political issues in my area.

Ms. WOHLBRUCK. Yes.

Mr. DURBIN. Where is your home? I did not catch that.

Ms. WOHLBRUCK. I am here. You said two minutes on the invitation. I did not think I would have someone come in from Illinois for two minutes.

Mr. DURBIN. Understood.

Ms. WOHLBRUCK. Our members are regional planning commissions. Ike Kirkekas, Jefferson County, covers part of your district and others. Solid waste is the biggest issue and the rural governments are really hard pressed to find the funding to comply with Subtitle D.

I know in Mr. Peterson's district you have come up with a regional strategy, in north central Florida. But they worked on it for three or four years.

Mr. PETERSON. We just opened the first one last month.

Ms. WOHLBRUCK. Right. And that was the North Central Florida Regional Planning Council and it was a tough go. And I know in the smaller communities, like I know many of your counties have over 10 percent unemployment, I understand, so they do not have the local resources.

And this is a very small program. You know, these programs are small. They are not even asterisks but they are really—$25,000, $50,000 is real money in rural areas and it can go a long way to getting a strategy so I encourage you to take a look at that program. Maybe you did not even know it was there.

Mr. DURBIN. I will.

Ms. WOHLBRUCK. We think it is helpful.

Mr. DURBIN. Thank you very much.

Ms. WOHLBRUCK. Thank you.

Mr. DURBIN. Ms. Kaptur, do you have any questions?

Ms. KAPTUR. I have no questions.

Mr. DURBIN. Mr. Peterson.

Mr. PETERSON. I do not.

Mr. DURBIN. Thank you very much for joining us. We appreciate it, Ms. Wohlbruck.

[The information follows:]

STATEMENT OF ALICEANN WOHLBRUCK, EXECUTIVE DIRECTOR, NATIONAL ASSOCIATION OF DEVELOPMENT ORGANIZATIONS (NADO), BEFORE THE SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES, COMMITTEE ON APPROPRIATIONS, U.S. HOUSE OF REPRESENTATIVES, MARCH 23, 1993

Mr. Chairman, members of the subcommittee, I am Aliceann Wohlbruck, Executive Director of the National Association of Development Organizations (NADO).

I appreciate the opportunity to testify on behalf of NADO. Our members are regional development organizations serving small cities and rural communities. Because economic conditions transcend jurisdictional boundaries, our members use substate regional strategies to solve locally-identified development problems. Known as development districts, councils of governments, and regional councils, these public-purpose institutions work with local governments and the private sector to improve economic opportunities and the quality of life in our communities.

NADO's goal is to assure that all rural citizens have the same quality of life and access to employment opportunities as those who live in major metropolitan regions. We believe that for economic recovery to occur there must be balanced growth and development in both rural and urban regions.

Included with my testimony are two reports which we hope you will find useful as you determine funding for rural development programs in fiscal 1994:

Revitalizing Rural and Small Metropolitan America which NADO presented to the Clinton administration during the transition.

Rural America: Worth the Investment which includes the results of a survey of over 1000 rural elected officials and regional development organizations.

Also included is a one-page summary of the Illinois Institute for Rural Affairs **Rural Life Panel Summary Report** which surveys 2000 rural residents in that state.

I also want to take this opportunity to thank you Mr. Chairman and this subcommittee for your steadfast support over the years for rural development programs within the Department of Agriculture. Were it not for your backing, there would be little hope for the future of rural America.

The Rural Economy

Rural America has nearly 62 million citizens, approximately 25 percent of the U.S. population and roughly equal to the number living in the nation's inner cities. Yet the problems related to rural and small metropolitan communities go largely unnoticed by the media and many in Washington.

Much of the 1980s growth bypassed rural America. In fact, many rural areas experienced recession-like levels of distress throughout the 1980s. From 1982 to 1987, rural employment grew at only two-thirds the rate of urban job growth. Today's recession has continued this downward trend in rural America. **USDA's Economic Research Service** reports that the current problems plaguing the nation have manifested themselves to a greater extent in our small towns and rural areas.

Although rolling waves of grain dominate the popular perception of rural life, the reality is that rural America is far more than farmland. Non-agricultural jobs comprise 90 percent of rural employment. Even on family farms, 60 percent of the total income is from non-farm sources. Yet federal funding for non-farm rural development has been slashed nearly 70 percent since 1980. At NADO we believe that public investment is essential to attract private sector development and that such investment must be made to uncap the rural potential.

Statistics can paint a gloomy picture for rural America, but there are sources of hope found across the nation. Many small communities and rural regions are forging ahead and improving their residents' economic opportunities. Through strategic planning, residents are developing long term approaches to rebuilding their communities. By working together in regional strategies, rural citizens are leveraging resources and making strides in revitalizing their communities.

USDA Rural Development Programs

The NADO membership urges the subcommittee to continue its support for the Rural Development Administration's water and sewer loan and grant programs, the business and industry loan guarantee program, the intermediary relending program, the rural development grant program, the community facilities loan program. In the NADO survey done in December 1992, 70 percent of rural officials said that infrastructure is their number one concern; 47 percent identified economic development and 18 percent listed solid waste and other environmental issues.

NADO supports the President's Rural Development Initiative which requests increases in rural water and wastewater loans and grants and community and business assistance. We are delighted to see the Clinton Administration's support for direct assistance to rural communities and businesses to improve the quality of life and increase employment. NADO members are also very supportive of the State Rural Development Council initiative because it is involving representatives from the federal, state, regional and local level, as well as the private sector, in

efforts to improve rural programs.

However, we are concerned that the President's **Vision of Change for America** calls for the Intermediary Relending Program to be targeted to small, emerging "micro-enterprises." Our studies show that there are a wide array of small businesses in rural areas that need financial assistance, and restricting the funding to "micro-enterprises" will limit the program's applicability in many rural areas. In our 1992 survey rural officials identified inflexibility as one of the greatest impediments to their use of federal programs. Restricting the aid to "micro-enterprises" will unnecessarily discriminate against many small businesses that contribute to their communities' economic well-being. NADO opposes limiting the additional IRP funding to "micro-enterprises."

In addition to the funding for the administration's rural initiative, we urge the subcommittee to provide $15 million for the Section 111 Planning and Technical Assistance. Currently, USDA provides no funding to help rural communities develop long-term development strategies or implement technical assistance programs to improve their local economies. Section 111, last funded in 1981, provides resources to implement locally-identified development strategies. From small business export development to geographic information systems (GIS) data collection, from tourism development to fire protection services, there is much to be done in rural development -- but very few resources. We believe that funding for Sec. 111 can provide much needed assistance for small towns and rural counties to develop a long term vision for their future.

Solid Waste Technical Assistance

In an August 1990 survey, the NADO membership identified solid waste management as the top priority facing local government-based regional development organizations. As a result, the association strongly supported Section 2325 of the 1990 farm bill (P.L. 101-624) which created a regional solid waste management grant program to assist rural local governments. In fiscal 1993, Congress funded this program at $3 million.

The findings of a 1992 survey of rural governments by the Coastal Regional Development Center (CGRDC) and the Solid Waste Association of North America (SWANA) confirmed NADO's earlier finding. The survey revealed that 45 percent of the of rural governments responding were planning to close their landfills next year because they could not comply with new federal landfill regulations under the Resource Conservation and Recovery Act (RCRA).

With rural areas generating nearly half of the solid waste in the United States, solid waste management has reached crisis proportions in many rural communities. In addition, the new RCRA Subtitle D landfill regulations are likely to lead to closure of half of the existing landfills in rural America -- which will result in extremely limited capacity for land disposal of rural solid waste. Although recycling and source reduction can reduce volumes of waste, most waste will still need to be disposed by either combustion or landfilling. To overcome the limited local

capacity and to be in compliance with costly RCRA regulations, the options clearly favor a regional approach to solid waste management over expensive long distance hauling of wastes to another facility. Facing the solid waste issue, local governments are ultimately responsible for solid waste management and liable for potential damage to the environment. Like it or not, the problem of solid waste has been "dumped" on local governments.

The overriding issue affecting local governments is how to construct an appropriate management framework to regulate the immense and diverse waste streams. There are communities across the country -- especially in distressed rural areas -- where none of the landfills meet new Environmental Protection Agency (EPA) requirements. These landfills have two options: either upgrading or closing, and both options are costly. The choices are difficult and require significant analysis and planning.

Many rural local governments are working together to develop regional answers to their solid waste disposal needs, and solid waste experts agree that a regional approach is the most cost efficient strategy to address solid waste disposal. In fact, EPA issued a statement encouraging regional strategies. "Small communities can further reduce the impacts of this rule by developing regional solid waste management facilities with other communities," the agency concluded.

Yet planning and implementation funding is extremely limited. Although RCRA mandates solid waste disposal standards, the EPA provides no funding for local planning. In many distressed rural regions, the tax base is inadequate to address the solid waste disposal needs.

Local governments still must confront landfill closure to be in compliance with RCRA Subtitle D, implement a new strategy for compliance, determine the viability of waste collection, consider regional recycling programs to divert waste, and evaluate converting landfills into waste transfer stations to separate the waste stream and reduce disposal costs. The SWANA/CGRDC survey found that rural governments greatest need is financial. Most the respondents also reported needing more technical assistance and research and development.

The NADO membership requests that the subcommittee fund the solid waste regional technical assistance program at $25 million in 1993. This would provide $500,000 within each state to help rural governments develop appropriate strategies to address the future of solid waste management. The Solid Waste Association of North America (SWANA), representing the interests of 4,200 local governments in managing solid waste, has requested to be included for the record in support of this position.

Conclusion

Once again, I would like to thank the subcommittee for its long standing support of rural development programs. I will be happy to answer any questions.

ILLINOIS RURAL LIFE PANEL PUTS RURAL CITIZENS ON THE RECORD

Since 1989, the Illinois Institute for Rural Affairs has quantified the views of people in rural Illinois by publishing the *Rural Life Panel Summary Report*. Each year the *Report* surveys 2,000 residents living in the 76 Illinois nonmetropolitan counties. (Counties are considered nonmetropolitan if they include no cities of 50,000 or more people.) The *Report*, published several times each year, summarizes the respondents' views on such topics as education, health care, job opportunities, and the environment, topics that are widely studied in large cities but often overlooked in rural areas.

The Panel's goal is to make sure that the needs of rural citizens are not ignored and to provide policymakers with enough useable information to make sound decisions on legislation regarding these citizens and their communities. The Panel sends the *Report* to legislators, economic development organizations, and local governments among others. Some of their findings are:

- Nearly two-thirds of the children surveyed felt that they would be unable to obtain good jobs in their communities and more than nine of ten believe lack of quality jobs is a good reason to leave. When questioned whether they would stay if the job they wanted were available in their communities, only one-quarter were sure they would leave.

- While 88 percent of respondents feel it is important to have a recycling program in their communities, only 40 percent actually have access to such a program.

- Just over half the respondents saw landfill pollution as a moderately serious or serious problem but the *Report* notes that as landfill space continues to shrink, the problem will continue to grow and communities will be forced to find new ways to deal with waste.

- Twenty-eight percent of these rural citizens are without health care coverage. The national average is about 14 percent.

- Although residents travel an average of only 10.8 miles to visit a doctor, a trip to the hospital averages 14.8 miles and 70 percent of those surveyed have had to travel outside their communities to receive specialized care.

Nancy Armstrong, project director of the Panel, feels that the *Report* "lets legislators know what works and what doesn't, which projects are popular with rural citizens and which aren't." She suggests that the publication is valuable for all citizens because "it makes people aware of the struggles that small communities are facing. Often, rural areas and inner cities face the same problems. The major difference is that city problems get attention, rural ones don't."

In addition to publishing the *Summary Report*, the Institute examines conditions and researches issues that affect rural areas, and helps the Rural Affairs Council and other state agencies solve rural problems. They conduct seminars and conferences, publish reports, and provide technical assistance to public transit providers and economic development leaders.

For more information on the Illinois Rural Life Panel or the Summary Report's *findings, contact Nancy Armstrong, Illinois State University, Research Services Building, Suite A, 4950 Community Research Services, Normal, IL 61761-6901 or call (309) 438-7771.*

RURAL HOUSING PROGRAMS

WITNESS

GARY LENKER, THE NATIONAL ASSOCIATION OF HOMEBUILDERS

Mr. DURBIN. If Mr. Gary Lenker is here now, National Association of Home Builders? Welcome to the table. All of your colleagues have been inundating our offices all day with their helpful suggestions and now we are glad to have you here before the subcommittee.

Mr. LENKER. Thank you, Mr. Chairman.

Mr. DURBIN. Your testimony will be made part of the record and you may summarize it if you care to.

Mr. LENKER. My name is Gary Lenker and I am a single family home builder from Dauphin County, Pennsylvania. I am a second generation builder and part of a 30-year-old family-owned company which has been involved with Farmers Home Administration programs for over 20 years.

I very much appreciate the opportunity to appear before you today on behalf of the National Association of Home Builders, of which I serve as the Rural Housing Council Chairman.

You indicated my written statement will be made part of the record and in respect for the time constraints which we are under today, I will offer just three main points.

First, there is a dire need for affordable housing in rural America today. Unless action is taken, this need will most likely deepen. The demand for FMHA housing programs runs far ahead of supply. At the close of fiscal year 1992, there were almost 67,000 single family housing loan applications on hand at FMHA. That same year funds were only available for one-third of the 133,000 eligible Section 515 applications.

Secondly, Farmers Home Administration programs not only have a strong track record of successfully housing Americans unable to obtain assistance from any other source but provide an economic stimulus which affects our entire nation's economy. In fiscal year 1992, the Section 502 direct loan program produced over 12,000 new homes and created over 22,000 new jobs. That same year, the Section 515 program produced over 14,000 units and created over 12,000 new jobs.

Our national association supports President Clinton's economic plan and is very gratified that it recognizes the rural housing industry as a vital economic contributor.

We would like to thank you for the increased fiscal year 1993 funding of $235 million for the Section 502 guaranteed loan program included in your just passed economic stimulus bill.

N.H.B. has been a strong supporter of the guaranteed loan program since its inception. In fact, Pennsylvania was a pilot program state and I personally built several homes that received guaranteed loan financing that first year. My firsthand experience demonstrated that the guaranteed loan program which I heartily support could not or should not take the place of the direct loan program. These two programs serve separate and distinct populations.

In addition, the Clinton plan would provide increased fiscal year 1994 funding of 300 million for the 502 direct loan program, 300

million for the Section 502 guaranteed loan program and a total of 150 million in additional rental assistance. This would include $75 million for vouchers and $75 million for Section 521 rental assistance.

Increased funding of the Section 521 rental assistance program is desperately needed to ensure the viability of the Section 515 projects. However, NHB believes that vouchers cannot serve as a substitute for new production and cannot be successful unless there is an adequate supply of rental housing units on the market. If a voucher program is created, we would strongly urge it to be project based rather than tenant based.

N.H.B. also heartily endorses these proposed funding level increases and remains hopeful that the economic stimulus which the Section 515 program provides will be taken into account.

We strongly oppose any funding reductions of the Section 515 program. In addition, we oppose any transfer of Section 515 monies to Section 521 rental assistance program

And, lastly, without an adequate delivery system, even well funded rural housing programs may not be effective. We strongly urge you to continue to protect existing FMHA rural housing programs. While we support necessary streamlining and consolidation of the Agriculture Department, we want to ensure that changes are not made which would lead to a lower level of service. It remains unclear how the administration's proposal to consolidate farm related offices into a new farm services agency would affect FMHA rural housing programs.

We look forward to providing you a detailed analysis on the issue as departmental reorganization plans are formally proposed.

In conclusion, I would like to thank you, Mr. Chairman, and all the members of the subcommittee for your continued support of affordable rural housing programs.

This concludes my statement.

Mr. DURBIN. Mr. Lenker, I am a big fan of the guaranteed loan program that you have participated in and you have indicated that it was a successful program in the Commonwealth of Pennsylvania. How did you kick it off? How did you get the information out to the banks, the realtors and the builders to get this going?

Mr. LENKER. Well, we really did that through our builders association, meeting locally with the realtors associations and the bankers associations around the state. We really did not kick it into high gear until we received the increased income limits to 115 percent of median income which occurred in the housing bill last year. But that really has helped us significantly.

Mr. DURBIN. If you can take one message back to the National Home Builders, I would hope they would embark on that as a national crusade. I would like to be the person sitting up here to try to push for as much as we can invest in that area. I think $4 million of our funds resulting in $240 million in construction is pretty good leverage. And if we can do that sort of thing and maybe even expand the eligibility to other areas and other people, I think we are going to serve our constituents a heck of a lot better.

Mr. LENKER. I agree with you wholeheartedly and will certainly take that message back.

Mr. DURBIN. Would you please do that?

Mr. LENKER. Thank you for that. Yes.
Mr. DURBIN. Thank you.
Ms. Kaptur?
Ms. KAPTUR. I have no questions.
Mr. DURBIN. Mr. Peterson?
Mr. PETERSON. No questions.
Mr. DURBIN. Mr. Smith?
Mr. SMITH. No questions.
Mr. DURBIN. Thanks for joining us.
Mr. LENKER. You are quite welcome. Thank you.
[The information follows:]

STATEMENT FOR THE RECORD

of

THE NATIONAL ASSOCIATION OF HOME BUILDERS

Submitted to the

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

of the

UNITED STATES HOUSE OF REPRESENTATIVES

on

FARMERS HOME ADMINISTRATION RURAL HOUSING PROGRAM APPROPRIATIONS

March 23, 1993

Mr. Chairman and Members of the Subcommittee:

My name is Gary Lenker and I am a single family home builder from Dauphin County, Pennsylvania. I very much appreciate the opportunity to appear before you today on behalf of the 160,000 member firms of the National Association of Home Builders, of which I serve as Rural Housing Council Chairman.

I would like to discuss the dire need for affordable housing which exists in rural America today. Unless action is taken, this need will not only continue to exist, but will most likely deepen.

2

SEVERE NEED FOR AFFORDABLE RURAL HOUSING PROGRAMS

According to the American Housing Survey conducted in 1991, 22 percent of all households reside in nonmetropolitan areas. Although that percent will fall somewhat as a result of the reclassification of metropolitan areas following the 1990 census, the housing conditions in rural areas will continue to affect a significant share of Americans.

Housing conditions in nonmetropolitan areas are generally worse than those in metropolitan areas. By the Department of Housing and Urban Development's definition, a larger share of the occupied housing stock in nonmetropolitan than metropolitan areas is inadequate. About 10.4 percent of the occupied units in nonmetropolitan areas are classified as inadequate compared with 7.2 percent in metropolitan areas. This equates to 2.1 million rural households living in substandard housing.

Although home ownership rates are higher in nonmetropolitan areas, (73 percent versus 62 percent in metropolitan areas), the availability of mortgage credit is a much more significant problem in these areas. The dispersion of the population in nonmetropolitan areas makes it difficult for lenders to achieve the economies of scale necessary to maintain a mortgage loan department. In addition, the special nature of rural properties and rural home buyers often makes it difficult for them to conform to secondary mortgage market underwriting standards. Without a strong secondary market outlet for loans, fewer banks are willing to originate mortgage loans. Hence, a much larger share of buyers in nonmetropolitan areas turn to unconventional sources for financing, often resorting to "bullet loans" that must be repaid in full after a short term. This shortage is exacerbated by the fact that there is a lack of federal mortgage insurance in rural areas. The share of mortgage holders in metropolitan areas that have Federal Housing Administration or Veterans Affairs Department financing is twice as great as the share of mortgage holders in nonmetropolitan areas who do.

Farmers Home Administration (FmHA) assistance is vital to the production of affordable rural housing for low-income rural home buyers and renters. The FmHA Section 502 direct loan and Section 515 rural rental housing loan programs produce nearly 30,000 units per year. This has accounted for more than 10 percent of nonmetropolitan starts for the past several years.

The demand for the FmHA housing programs runs far ahead of supply. Since 1978, the number of new units assisted by these programs has been slashed by 70 percent. The **Section 502 program**, **Section 515** program and **Section 521** rural rental assistance program are all oversubscribed. At the close of fiscal year 1992, there were almost 67,000 single family housing loan applications on hand at FmHA. Preapplications for rental units totalling $1.6 billion have been received by FmHA. In fiscal year 1992, funds were only available for one-third of the 133,000 eligible Section 515 applications.

The Farmers Home Administration is a lender of last resort. In order to participate, FmHA borrowers must document that they were unable to qualify for conventional loans. In 1991, 4.1 million nonmetropolitan households paid more than 30% of their income for housing. Of those, 1.6 million paid more than 50%. That same year 18.7 percent of nonmetropolitan households had incomes below the poverty rate. This compares to 12.6 percent of metropolitan households living below the poverty line. Without FmHA housing programs, even more rural households would remain highly overburdened.

RURAL HOUSING AS ECONOMIC STIMULUS

Rural housing programs of the Farmers Home Administration not only have a strong track record of successfully providing housing to Americans unable to obtain assistance from any other source, but provide an economic stimulus which affects our entire nation's economy.

Housing starts in nonmetropolitan areas are a significant component of residential fixed investment each year. Nonmetropolitan starts since 1970 have accounted for between 14 and 34 percent of starts annually.

In fiscal year 1992, the Section 502 direct loan program produced 12,888 new homes, created 22,670 new jobs, generated $647 million in wages and had a total tax impact on federal, state and local government of $265.5 million. That same year, the Section 515 program produced 14,664 units, created 12,112 new jobs, generated $346.1 million in wages and provided federal, state and local governments with $156.9 million in tax revenues.

The National Association of Home Builders has adopted formal policy supporting President Clinton's broad-based goals to: provide incentives to create jobs and stimulate the economy; eliminate the credit crunch; encourage long-term investment in the future of America and its people; and reduce the annual federal deficit by half over the next four years.

We are gratified that the President's economic plan recognizes the rural housing industry as a vital economic contributor to our economy. "A Vision of Change for America" proposes fiscal year 1993 supplemental funding of $235 million for the Section 502 unsubsidized guaranteed loan program and $9 million for the Section 504 low-income housing repair loan/grant program. The plan also suggests increased fiscal year 1994 funding of $300 million for the Section 502 direct loan program and $300 million for the Section 502 guaranteed loan program. NAHB has shown a strong commitment to the Section 502 guaranteed loan program since its inception. However, we do not support increased funding of the guaranteed loan program if it is at the expense of the direct loan program. The direct and guaranteed loan programs serve separate and distinct populations, and neither one can serve to duplicate the efforts of the other.

In addition, the Clinton plan would provide a total of $150 million in additional rental assistance in fiscal year 1994. This would include $75 million for vouchers and $75 million for Section 521 rental assistance. Certainly, increased funding of the Section 521 rental assistance program is needed to insure the viability of Section 515 projects. However, NAHB believes that vouchers can not serve as a substitute for new production and can not be successful unless there is an adequate supply of rental housing units on the market. If a voucher program is created, we would strongly urge it to be project based, rather than tenant based.

NAHB heartily endorses these proposed funding level increases, which will have a ripple effect felt in all geographic areas of the country. We estimate that a $300 million spending increase for the Section 502 direct loan program would generate about 6,000 jobs, $173.4 million in wages, and $71.4 million in federal, state and local taxes.

Although the President's economic plan does not propose an increase to the Section 515 rural rental housing loans program, we remain hopeful that the economic stimulus which the program provides will be taken into account. NAHB strongly opposes any funding reductions of the Section 515 program.

POTENTIAL REORGANIZATION OF THE DEPARTMENT OF AGRICULTURE

Without an adequate delivery system, even well funded rural housing programs may not be effective. The National Association of Home Builders has steadfastly stressed its concerns about the future of the Farmers Home Administration.

NAHB strongly urges you to continue to protect existing FmHA rural housing programs. While we support necessary streamlining and consolidation of the Department of Agriculture, we want to insure that changes are not made which would lead to a lower level of service. A depletion of FmHA housing staff is a serious threat to the future effectiveness of rural housing programs.

Housing is a vital component of the rural economy, and therefore should be a major factor in any proposed rural economic development plan. A lack of available affordable housing, and its associated infrastructure, seriously constrains any future economic expansion of our rural areas.

It remains unclear how the Administration's proposal to consolidate farm related offices into a new Farm Services Agency would affect FmHA rural housing programs. We look forward to providing you a detailed analysis on this issue as departmental reorganization plans are formally proposed.

CONCLUSION

In conclusion, I would like to thank Chairman Durbin and Members of the Subcommittee for their continued support of homeownership and rental opportunities for low- and moderate-income rural Americans. I look forward to continuing to work with your Subcommittee in the production of affordable housing.

FOOD AND DRUG ADMINISTRATION PROGRAMS

WITNESS

TED R. MANNEN, EXECUTIVE VICE PRESIDENT, HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

Mr. DURBIN. Ted Mannen, Health Industry Manufacturers Association. Welcome.

Mr. MANNEN. Thank you.

Mr. DURBIN. You have heard the drill.

Mr. MANNEN. Yes, I have.

Mr. DURBIN. Your statement is part of the record and you may proceed.

Mr. MANNEN. Thank you.

The gentleman a little earlier mentioned that he was from Illinois. Not to be outdone, Mr. Chairman, I just wanted you to know that my hometown is Mt. Vernon.

Mr. DURBIN. God bless you, that is in my district.

Mr. MANNEN. Absolutely. Absolutely. That is where my parents still live so I thought I should make that part of the record here today.

Mr. DURBIN. Folks are really working to get on my good side, I will tell you. [Laughter.]

Mr. MANNEN. I do appear today, though, as Executive Vice President of the Health Industry Manufacturers Association known as HIMA and on behalf of HIMA we very much appreciate this chance to testify.

H.I.M.A. is a national trade association representing some 300 manufacturers of medical devices, diagnostic products and health care information systems. FDA is a critical factor to our industry's ability to produce technologies that save and improve lives. Concerning FDA, there are three points I would like to leave the subcommittee with today.

First, the overall device review climate at FDA continues to deteriorate.

Second, there are new structural demands facing the agency that we fear will make things worse.

And, finally, FDA needs an adequate appropriation to meet these new structural needs.

Let me just begin with a quick word about the overall product review climate and I think the point here is that there has been a sharp drop in the number of new device approvals. The number of pre-market approvals for breakthrough devices has fallen from an average of nearly 50 in the late 1980s down to 27 for fiscal year 1991 down to just 12 for fiscal year 1992.

At the same time, the review periods for the so-called 510K products, which are for incremental innovations, have increased from 102 to 126 days and all indications are, Mr. Chairman, that those numbers are going to continue to rise.

That is a very brief snapshot of the situation as we see it today. Let me turn now to three new structural demands that could make this situation much worse.

The first such demand is represented by the Clinical Laboratory Improvement Act or CLIA. FDA is simply unable to fulfill its new

responsibility to assign complexity categories to in vitro diagnostic or IVD products. The effect of this non-assignment is to assign all IVD products by default to the highest complexity category, which makes it difficult for health care providers to obtain the technologies they need.

The second structural demand facing FDA is implementation of the Mammography Quality Standards Act of 1992. Under this new law, FDA must issue regulations and certify all mammography facilities by October of 1994.

The final new structural demand facing FDA is perhaps the most ominous. The problem begins with the fact that fear of liability lawsuits is leading remote suppliers to cease selling some raw materials to manufacturers for use in implantable medical devices. This could result in a serious shortage affecting pacemakers, hip and knee joints and many other kinds of implants.

Those manufacturers that are able to obtain substitute raw materials may have to submit new 510Ks and PMA supplements to satisfy FDA's pre-market review criteria. The overall effect could be to send a potentially large number of new submissions into a system that is already seriously backlogged.

Let me just conclude by saying that we do not yet know the administration's proposal for fiscal 1994 FDA appropriations. But we do know for this same fiscal 1994 that CLIA will require some $30 million or 170 full-time equivalents; that the Mammography Quality Standards Act will need $13 million or 50 FTEs and that to qualify new sources of raw materials will require additional though at this point unknown new resources.

And I should say that this is on top of the resource shortages FDA is already experiencing as it tries to implement 17 sets of new regulations under the Safe Medical Devices Act of 1990.

Mr. Chairman, we respectfully recommend to the subcommittee that in considering FDA's appropriation you take careful account of these new structural demands on the agency.

We further request that HIMA have the opportunity to submit a more specific recommendation after the administration's proposal is released.

Let me just close by saying that it has been suggested that the way to truly fix the device review problem at FDA is through user fees on our industry and let me just tell you why we do not share that view.

In the first instance, user fees, we believe, operate as a tax on the innovativeness of the small, entrepreneurial companies that principally compose our industry. But in addition, user fees, even if plowed back into FDA and I understand it is perhaps not safe to assume they would be plowed back into FDA but even if they were plowed back into FDA, user fees would simply not get to the real underlying problems with the product review process. I think to do that, FDA has to take some hard internal steps of its own.

Mr. Chairman, we very much appreciate this chance to testify and I would be happy to try to answer any questions you or others on the subcommittee may have.

Mr. DURBIN. Mr. Mannen, on the biomaterials issue, if we were to put more money into the review process, that would not solve the problem you have identified, where DuPont and other compa-

nies have announced that they are going to withdraw from the market because of potential liability.

Mr. MANNEN. It would not. It would not. What additional resources would help do is the following: if companies were able to find substitute suppliers, other than DuPont, other than some of the other companies that may pull out of these markets, even if they find those substitute suppliers, FDA would define that as a new material which requires an additional pre-market submission so it would be more to deal with hopefully the happy consequence of finding substitute suppliers. But you are quite right, it would not address the fundamental problem which requires other steps.

Mr. DURBIN. Is your association suggesting other steps?

Mr. MANNEN. We are. We are looking at some possibilities of product liability amendments that would seek to perhaps indemnify some of these companies that feel that they cannot supply medical device manufacturers at this time.

Mr. DURBIN. Dr. Kessler sat in the same chair you are in a couple of weeks ago and talked about the whole problem with the breast implant tissue and the fact that the companies involved frankly had not projected what the long-term presence of this biomaterial would mean to a person's body and finally, as he said, it was frankly no one's responsibility to look that far in the future. Now having seen the sorry consequences in some cases, many of these companies apparently are reflecting on whether there is any profit in this industry at all.

I think you are correct in assuming that you have to open at least two fronts to address it: review so that we can bring in new materials and secondly on the question of liability. And it will raise some very difficult questions on the statute of limitations and discovery.

Mr. MANNEN. Absolutely.

Mr. DURBIN. Particularly when manufacturers are touting the heart valve or the hip joint now as being a lifetime investment and yet do not want to be held liable for a lifetime if it does not work. That part is tough.

I understand your association's position on user fees but in all candor, we have heard this before from the drug companies. Ultimately they decided it was in their best interests to sit down and work out a user's fee. I do not think it is going to happen this year to your industry, but I hope we can allay some of your fears if we decide that is the best avenue to follow to put some resources in review so that the good medical devices can get on the market more quickly.

Mr. Peterson?

Mr. PETERSON. No questions.

Mr. DURBIN. Thanks for joining us. We appreciate it.

Mr. MANNEN. Thank you.

[The information follows:]

STATEMENT OF

TED R. MANNEN

EXECUTIVE VICE PRESIDENT

HEALTH INDUSTRY MANUFACTURERS ASSOCIATION

ON

FOOD AND DRUG ADMINISTRATION

FY 94 APPROPRIATIONS

SUBCOMMITTEE ON

AGRICULTURE, RURAL DEVELOPMENT & RELATED AGENCIES

HOUSE COMMITTEE ON APPROPRIATIONS

MARCH 23, 1993

Mr. Chairman, my name is Ted Mannen, and I am the Executive Vice President of the Health Industry Manufacturers Association (HIMA). On behalf of HIMA's member companies, I want to thank you for this opportunity to testify on Fiscal Year 1994 Food and Drug Administration appropriations.

HIMA is a national health care trade association representing nearly 320 medical device, diagnostic product, and health care information system manufacturers, whose goal is to bring high quality, life-saving products to millions of patients around the world. The $39 billion medical technology industry has been recognized by the Commerce Department as the most consistent performer in the past five years. HIMA member sales represent over 90 percent of this $39 billion industry. More recently, Commerce announced that the three fastest growing sectors of the U.S. economy for the period 1988 - 1993 were all in the medical technology industry.

These Commerce findings are not insignificant -- they recognize the jobs and positive trade balance this industry has provided. An average of 12,000 jobs per year have been created by an industry dominated by entrepreneurial small businesses -- businesses that currently employ some 270,000 people. The industry has also contributed to the U.S. trade surplus at an average annual rate of 20 percent over the last five years, contributing over $4 billion each in the last two years alone. Significantly, over one-third of the industry's growth has been used to keep up with the strong overseas demand for U.S. medical device exports. It has been said that small businesses are the engine of the U.S. economy, and we believe the medical technology industry is living proof of this.

Unfortunately, while our industry is strong now and has been able to maintain its innovative, creative, and competitive edge, the future is not assured. Our strongest competitors are Germany, with whom we maintain a negative balance of trade, and Japan. Recently, the Japanese government called for more government support of R&D in certain medical technology sectors -- in short, targeting these sectors as "industries of the future." We are concerned about this turn of events given past successful Japanese targeting of the U.S. steel and semiconductor industries.

Thus, like some of the medically fragile patients who rely on our devices, our industry too is fragile. A critical factor in the strength or weakness of the medical technology industry is the Food and Drug Administration, our lifeline to domestic and world markets. Ultimately, the deficiencies of the Agency, in particular the past and present resource inadequacies of the **Center for Device and Radiological Health (CDRH)**, hurt U.S. patients and the innovation and competitiveness of the industry.

There are three important points I would like to leave with you today: first, the overall product review climate has continued to deteriorate; second, there are four new structural forces that will dramatically increase the level of resources the Agency needs; and third, I would like to leave you with our recommendations about FDA's resource needs.

Product Review Environment

With respect to the product approval process, over the past several years, the number of product applications submitted to CDRH has increased, while the number of products actually moving through the pipeline has decreased, leading to an ever-growing backlog and virtual gridlock. Without question, the precipitous drop in medical technology product approvals is undermining the strength of our industry, and jeopardizing patient access to life-enhancing, life-saving technologies.

The number of pre-market approvals (PMAs) for breakthrough devices has fallen from an average of almost 50 per year during the late 1980's to 27 in 1991, to only 12 in 1992 -- a drop of 56 percent just in the last year. And the time it takes to complete such product reviews has continued to soar, increasing more than 50 percent between 1990 and 1991.

The trends are equally disturbing when it comes to 510(k)s, those products that represent incremental innovations. FDA has reported that 510(k)s now take an average of 126 days, an increase of 24 percent and well above the 102 days it took in 1991. Some 510(k)s are taking as long as 200 days and beyond. Additionally, a 510(k) backlog is growing: between 1991 and 1992, 510(k) submissions increased almost 13 percent, but the total number of decisions dropped 9 percent, and the total number of substantial equivalence decisions -- the decisions required for market access -- dropped 12 percent.

Structural Changes in FDA Responsibilities

What I have described is the current environment for FDA device reviews. Without changes, we expect that that environment would continue to deteriorate -- but the deterioration will be even more serious now because of four new structural challenges that will dramatically draw on FDA's resources.

The first such structural challenge is the implementation of the Clinical Laboratory Improvement Act. FDA was essential in breaking an early logjam in the implementation of CLIA. The initial regulations proposed by the Health Care Financing Administration would have required HCFA approval for in vitro diagnostic products, in addition to the normal FDA pre-market approval for IVDs. It was widely believed this dual regulatory process would severely impede innovations in laboratory diagnostics. After negotiations with HCFA and the Centers for Disease Control, FDA agreed to lend its considerable expertise and assume the burden of CLIA's technology-related components, thus maintaining an innovative IVD environment.

Today, however, FDA is not fulfilling the responsibilities it agreed to assume, specifically assigning "complexity categorizations" for new IVD products on September 1, 1992. This is having a devastating effect on the ability of our members to provide new IVD products to customers since products without a complexity rating are by default placed in the highest complexity category. It is our belief that FDA is still committed to timely CLIA implementation but simply does not have the requisite resources to fulfill this commitment.

A second structural challenge which is proving burdensome to FDA's limited resources is the implementation of the **Mammography Quality Standards Act of 1992**. Under this new law, FDA must issue regulations establishing quality assurance programs, including the reliability of the equipment and the clarity and interpretation of its image. FDA must also establish on-going personnel training and education standards. Additionally, FDA must also certify all mammography facilities by October 1994, and all facilities must have an annual on-site inspection -- no small task in and of itself.

A third challenge for the FDA is the implementation of the **Safe Medical Device Act of** 1990, under which FDA was required to issue 17 sets of new regulations. Again, FDA is finding it difficult to meet its responsibilities. For example, FDA has already failed to meet its November 28, 1992 statutory deadline for publishing final device tracking regulations.

Availability of Biomaterials

A final structural force concerns raw materials used in device production. Concern over product liability is leading suppliers of some raw materials to stop selling those materials for use in implantable medical devices and their components, leading to a potentially devastating shortage of raw materials for implantable medical devices. Dupont, for example, has publicly stated its decision to withdraw from the market. Other raw materials manufacturers have indicated they are considering following suit for the same reasons.

This is a serious situation -- the availability of biomaterials has grave and life-threatening consequences for both patients and our industry -- and I want to take a moment to explain exactly what it means. The raw materials, or polymers involved, affect almost all implants, including pacemakers, hip and knee joints, hydrocephalus shunts, sutures, tracheostomy tubes, and many other products.

Because we do not yet know the availability of substitute raw materials, we do not yet know the magnitude of the problem. We do, however, know the following: in order to demonstrate safety and efficacy as required by the product review process, those manufacturers who are able to obtain substitute raw materials may have to submit new 510(k)s or PMA supplement applications to a system that is already backlogged. It is not entirely clear that the system will be able handle this additional strain.

HIMA has already heard from concerned patients and patient groups -- the father of a child suffering from hydrocephalus frantically called asking if he should purchase hydrocephalus shunts now for his young child. Clearly, the health and well-being of American patients is at stake; and there will be many more such calls from patients all around the country unless this issue is effectively addressed.

HIMA has begun an effort with the FDA in an attempt to solve the problem. While we don't yet know the specifics of the solution, two things are clear: substitute materials must be safe, and there must be an expedited FDA review process to prevent an imminent shortage of implantable devices.

To sum up, there is a large and growing backlog of device approvals at the CDRH to which must be added the implementation of the Clinical Laboratory Improvement Act, the Safe Medical Devices Act, the Mammography Quality Standards Act, and a potentially devastating biomaterials shortage.

Recommendation

I cannot emphasize enough our industry's support for a strong yet consistent and predictable product review process. We believe such a review process is in the best interests of both patients and industry. The Honorable John Dingell, Chairman of the Subcommittee on Oversight and Investigations, has exercised considerable oversight in this area and the Center for Device and Radiological Health is also looking at ways to improve the process. Finally, because of the serious implications the slowdown in product approvals has for our industry and patient health, HIMA has tried to play a constructive role and worked hard to come up with suggested recommendations to FDA on ways a clear, consistent, and predictable product review process might be established.

Thus, we find ourselves in the unique and somewhat novel situation in which the FDA, the industry and the House authorizing committee all appear to share the same sentiments with respect to improving the product approval process. The potential biomaterials shortage only adds urgency to this mission. American patient's access to critical medical technology is in jeopardy, and it deserves the full attention of manufacturers and government.

For these reasons, HIMA respectfully requests that the Subcommittee provide full, adequate, and appropriate funding for the FDA to enable the agency to fulfill its many and varied missions. For fiscal year 1993, the Administration requested $797 million for FDA operations -- an estimate that merely allowed the FDA to maintain current operations and which did not account for any program increases. As a result, while the $780 million appropriation that FDA actually received for FY 1993 represented a $32 million increase over FY 1992 appropriations, it did not allow FDA to maintain current operations, and it did not take into account FDA's many new statutory responsibilities.

While we do not yet know the Administration's FY 1994 FDA budget recommendation, we do know that just to implement the congressionally mandated **Safe Medical Devices Act**, will cost nearly **$26 million or 300 FTEs**. The implementation of the technology-related components of the **Clinical Laboratory Improvement Act** has been estimated to cost **$30 million or 170 FTEs**. And finally, it will cost **$13 million or 50 FTEs** to implement the congressionally mandated **Mammography Quality Standards Act**. We respectfully recommend that these estimates be a key factor the Subcommittee considers in its FY 1994 FDA appropriation. In addition, we respectfully request the opportunity to submit a new and more specific recommendation when we have had an opportunity to review the new Administration's budget proposal.

In closing, I want to touch on an issue that refuses to be ignored. Many will, and have argued that the above mentioned problems at FDA are an argument for user fees for the medical technology industry.

As you may recall, HIMA opposed the inclusion of the medical technology industry in the user fee legislation proposed last year. User fee legislation for biological and prescription drug manufacturers was subsequently passed and enacted into law. The Clinton Administration has proposed user fees for both the medical device and pharmaceutical industries to be applied to deficit reduction activities. Furthermore, it is our understanding that FDA intends to submit a supplemental appropriation request in order to implement the pharmaceutical user fee law.

Unfortunately, the perception exists that there is an unwillingness on the part of the Agency, not just recently, but over a number of years, make the reforms necessary to establish a clear, consistent and predictable product review process within the Center for Device and Radiological Health. This perception has been borne out as industry has witnessed the systemic deterioration of the product review process and the virtual gridlock that we see today.

The medical technology industry has no reason to believe that a review process that is now deteriorating will be responsive should they invest their limited cash flow and capital in the system. Industry simply has not seen satisfactory efforts within the FDA to command the resources or make the necessary reforms to improve an intolerable situation. In short, it is impossible to believe a phoenix will arise from the ashes by simply agreeing to user fees. The Agency itself must lead the way.

FARM PROGRAMS

WITNESS

DENISE O'BRIEN, VICE PRESIDENT, NATIONAL FAMILY FARM COALITION

Mr. DURBIN. Denise O'Brien with the National Family Farm Coalition. Welcome.

It is a pretty diverse group here today, is it not? We do not have the pickle packers today, they usually come in, so we usually have quite a different array of folks here.

Thank you for joining us. We have your testimony which will be included in its entirety.

Ms. O'BRIEN. Thank you. I think I have made a little mess here but you will have to pardon me because I got up at four this morning and left my family in Iowa, where I am from. I am a dairy farmer, an organic dairy farmer, in Iowa and I got to bed late last night because I was trying to make arrangements for all my children while I am gone for the next few days and then getting up at four and getting my plane at six is more than 12 hours ago.

Mr. DURBIN. This is worse than the trip from Palmer, Alaska.

Ms. O'BRIEN. Yes, I think in a way it might be.

But I want to thank you for letting me testify today on behalf of the National Family Farm Coalition. I am going to use some water to interrupt my self. Just a minute.

I farm with my husband and three children on a 180-acre farm in southwest Iowa. We are very diversified. We milk 30 cows. We have organic fruits. And we raise free-range chickens that I raise with a group of women in a women's cooperative that we started two years ago as we have been looking at supplemental income on the farm and a way for women to stay on the farm and raise some extra income and also to provide safe, quality food for people in our area.

Unfortunately, creativity, diversity and organic does not translate into profitability and sustainability, given the current farm prices we are receiving and our costs of production. And I think given the 1980s, the situation of the 1980s where many of us carry a debt load over into the 1990s and on top of that the low commodity prices, I think it all—it is kind of interesting for me to sit here and listen to these rural groups come in and say we need this appropriation, we need this appropriation and in my mind I am thinking—I am not an economist, I have been a farmer for 17 years, I have a good share of life experience to that. It seems to me that a lot of these questions would be resolved—partially resolved, I would not say totally resolved, if farm income was adequate in the rural part of our country. When we have a bushel of corn at $1.80 a bushel right now and it costs us about $3.00 to raise it, there are many people going broke. We cannot subsist on that sort of arrangement.

My comments today focus on five important areas: agriculture credit, minority outreach and education, sustainable agricultural research, USDA reorganization and the FDA approval process for the bovine growth hormone.

We are also very concerned that the impending trade agreements have serious implications for the future of family farmers in this

country. NAFTA raises serious concerns on how USDA programs can operate to benefit family farmers or consumers when undermined by a free trade agreement that could jeopardize both the farm programs and consumer confidence in our food.

There are several issues that I would like to point upon here and one is especially USDA. I was pleased to just hear the housing person talk about FMHA and rural housing and their perspective on guaranteed and direct loans. Farmers Home Administration plays a major part in my own farming operation in that we are FMHA borrowers restructured in 1987 after the 1987 Credit Act and have continually fought with our county supervisor on trying to get operating money for our farming operation.

Training at USDA is essential for employees and farmer borrowers. County committee members have new roles but lack any real training. We urge USDA to prioritize their outreach to farmers and their training programs to clearly explain the agency policy so that farmers can once again turn to local offices for assistance.

We want to ensure that reorganization is done so that it makes sense, not just to save $1 billion in the budget book. The Bush Administration's strategic plan for FMHA needs to be revisited due to its clear direction of eliminating a role for FMHA in both farm and housing lending. We want to ensure that the employee consolidation plans that are supposed to be accomplished by attrition are not accomplished by consolidating subagencies where there has been an important work performed by career employees.

Of particular concern is the low number of women and people of color in many jobs both at the national and at the local levels.

An area of major concern since 1989 has been the operation of the FMHA appeal system. In 1987, a new appeal system was established in the Agricultural Credit Act. It was working very well, overturning nearly 60 percent of the cases in support of the FMHA borrower until the independence of the national appeals staff was directly jeopardized by the intervention of the FMHA director. Since that time, the appeals process has basically been frozen. Farmers have won appeals that are then ignored by the local FMHA offices and other farmers have been waiting months and now years for final decisions.

I think that I would like to go on from there in talking about the appropriations for the Farmers Home Administration. The National Family Farm Coalition strongly supports the Farmers Home Administration direct operating loan funding level included in your fiscal year 1993 agricultural appropriations bill and hopes farmers will in fact receive operating funds during the upcoming months.

I have been told in my own particular instance for the last five years that there was no money available for direct lending and in fact know that last year $279 million was returned that was not spent, despite many applications on hand of which ours, I am sure was included.

The $850 million level reaffirmed the need for the refocus on direct lending as a reflection of the failure of the guaranteed loan program for the taxpayer and the farm borrower. We have not in our local community been able to find a bank that will do a guaranteed loan through FMHA.

Another concern of mine as far as credit goes is just in the last few weeks, I have had many calls from farmers expressing concern from a local bank that has been shutting off credit to farmers. There are 43 farmers that have not gotten operating funds and have been forced into—several have been forced into a foreclosure auction, liquidation auction because they could not get funding for the next year. They have gone to other banks to find operating money but when this gets to be what—March 22n, 23rd, it is awfully late to be looking for funds for the next year to be operating with.

We are concerned that President Clinton's Vision for Change document calls for a 25 percent cut in the direct loan program and it ignores the critical need and the important role of direct loans for beginning, minority and limited resource farmers. We hope that the subcommittee understands the importance of increasing FMHA direct loans to meet needs, not cutting them. Personally we have tried to obtain these operating loans for years. I do not want to repeat myself, so I would—we are requesting that the funding level for direct farm operating loans be increased to $950 million to meet significant unmet need.

We also urge that direct farm ownership up to $100 million and $100 million in funds for the guaranteed farm ownership interest assistance program. We recommend $400 million in guaranteed farm ownership and $400 million in guaranteed operating loans with interest assistance.

My husband and I have been on a list for ten years to be able to buy the family farm and we have again been told that there were no funds available. In fact, when I was in the FMHA office the other day, the supervisor told me that the only funds that they are loaning right now is for beginning farm programs and beginning farmers, which I really have a problem with because with the low commodity prices, I think we are setting up young people for failure if we are going to be trying to get them into farming.

We urge the subcommittee to appropriate at least $6 million for fiscal year 1994 for the agricultural mediation programs. There have been several states that have had very effective mediation programs and as compared to the states that do not have mediation programs we are finding that there is a great discrepancy in how farmers turn out in this issue, the success and failure rate.

In the 1990 Farm Bill, there was a new program to expand outreach and education to minority farmers through community based organizations and educational institutions. We strongly urge the subcommittee to appropriate $10 million per year authorization level to try to make a real difference in this area.

When I talk to minority farmers in the southeast, I was just reading a figure this morning where the number of farmers under 25 that are African-American is 172 farmers in our country, which is a shame.

We are also asking—I mentioned this before, I mentioned that I am an organic farmer and I consider organic sustainable. And I am very concerned about the appropriations for sustainable programs and how they are being funded or not funded.

We urge funding for the Sustainable Agriculture Research and Education Program at $30 million. The SARA and LISA program

has been funded since 1988 yet continues to provide funding for less than 10 percent of the eligible programs. As we look at the 1990s and into the year 2000 and we see the environmental problems that are arising on our farms with water quality and air quality, we need to look at this type of funding to help farmers make the transition, to have an infrastructure for farmers to make the transition into more sustainable approach to agriculture.

On behalf of the National Family Farm Coalition, I urge you to fund these priority programs for fiscal year 1994 within USDA. I also want to raise our concerns about the pending approval of bovine growth hormone. The failure of adequate response to the important issues raised in the August 1992 GAO report on both animal and human health impacts needs to be addressed. I urge the subcommittee to assess FDA's research plans on these important areas.

My future as a dairy farmer depends on consumer confidence in milk and the ability to compete by receiving a fair price for the product. At this point in our life, my husband and I talk about—sometimes daily, mostly on a weekly basis, about leaving farming and finding something else to do with our lives. We are in our early 1940s. And we consider that our tie to the land and what we feel is our moral obligation to raise safe food is being overcome by the stress of trying to be there and make an adequate income. Neither one of us work off the farm, we both work 15 hours a day and, of course, when I am gone, my husband works more hours a day, to raise our children, to raise our crops and to milk our cows.

I personally do not see a future for farming for my children and I would not encourage them to at this point, although it breaks my heart to say that, because there is no future in it at the income levels that we now face.

Just recently, in fact, it was last week, a young woman who was a babysitter for me for my younger children who is now a mother herself and her parents and her husband's parents live in our community, in fact, very close in my farm neighborhood, I just heard that she and her husband had to move to Nebraska and get a job over there. He was farming, they were farming with his father and there is just not enough income. And I know that they did not want to move out of our area. And that again breaks my heart that that sort of thing is happening.

I appreciate being able to talk to the committee and would answer any questions.

Mr. DURBIN. Tell me a little bit about the National Family Farm Coalition.

Ms. O'BRIEN. Well, it is an organization that was started in the mid 1980s that represents 38 farm organizations within 30 states. They are not just farm organizations, they are rural advocacy groups. The group that I belong to in Iowa that hooks me into the National Family Farm Coalition is a group that I helped found in 1982 called the Iowa Farm Unity Coalition. And in Iowa, we work on similar types of issues at the state level. We work on the industrialization of agriculture, corporate agriculture, mediation. There are very similar types of legislation that we promote and we strongly, strongly believe in the structure of family farm agriculture as the basis for rural America, for income for rural America.

Mr. DURBIN. And you know as I do, in fact, you have expressed it yourself, that you are part of a unique group, to be a full-time farmer.

Ms. O'BRIEN. Right.

Mr. DURBIN. That really is unique in my part of the world.

Ms. O'BRIEN. Right.

Mr. DURBIN. And to have a husband and wife both as full-time farmers, you have really got to be in a very small percentage.

Ms. O'BRIEN. Well, we are. And the unfortunate thing about it is that our family qualifies for food stamps and in 1985 and 1986 we were on food stamps. And then the milk prices got better and things were a little bit better in the late 1980s and now in the 1990s, it just hit full force again and there is too much social stigma to go back to that.

Now, my children do participate in the reduced lunch program but I think it is pretty ironic that farmers are participating in food stamp programs. We are where we were in the 1980s. We have not made a lot of progress. And we have decided—you know, it takes two people to run our farm and to keep the land stewardship, the things that we do that we think are good and valuable to our rural communities, we participate in our rural communities, and when we started farming 17 years ago, we wanted to raise our children together and I think that is very unique in our society these days, too. And we have stuck with it and it has been very difficult but I think it is one of those things that we have been able to stick to.

Mr. DURBIN. Do you and your husband both come from farm families?

Ms. O'BRIEN. We farm my husband's father's farm and so we are in the house that he has lived in 40 of his 43 years. And I come from the town. I did not come from a farm family, I have learned everything about farming from husband. He is a very good teacher. And my children——

Mr. DURBIN. He needs your help, that is why.

Ms. O'BRIEN. Pardon?

Mr. DURBIN. He needs your help.

Ms. O'BRIEN. Yes. And my children—our children go to school and they have some of the same teachers we had in school. And I really feel very comfortable with that. I think it is a situation—our children's grandparents are close by. There are certain things that we value very strongly and in order to keep those values, we have to make a lot of sacrifices.

Mr. DURBIN. Is that it? Is that the bottom line? You are not in it for the money, clearly.

Ms. O'BRIEN. No. We cannot be in it for the money. And I have to be home. I should be home now pruning 800 apple trees so, yes. We just try—yes. The bottom line is that we value what rural America has been but we are very concerned about what rural America is changing into and that is a very high level of stress. We are coming up now—I just talked to someone this morning about the number of suicide calls that are coming into the hotlines in the rural areas and the rural concern hotlines and we are getting into that very stressful part of the year where we are supposed to be putting crops in the ground. We have had a hard winter. All over the whole country we have had a hard winter. We had a bountiful

crop last year but the quality of feed was very poor and we have had to buy a lot of inputs, feed supplements to feed our cows. So we have additional costs placed on us in addition to having very low commodity prices. And milk prices are right in there. It is not—the milk price on our last milk check was about $11 a hundredweight and we have figured on our farm it takes us about $13 a hundredweight, to raise 100 gallons of milk. So we are doing this out of the dedication of our hearts, as you can tell.

And some people may say, you know, why do you not just get out? And we do talk about that. But when it actually comes down to it, it is very difficult for us to leave our friends and our family and our community because there are no alternatives for us to stay in that community. We would be like the young family I described moving to Nebraska. We would definitely have to move away.

Mr. DURBIN. And you do not have to answer this if you do not want to, but what is your education?

Ms. O'BRIEN. My education? Mostly life experience. I have had two years of college. I have had a very good rural educational system. Iowa is very famous for having a good educational system. And I think actually part of my education as a farmer is having time to think. I have a very privileged life in that when I am out working, I do not have to deal with anybody and I can think and process a lot of things and I think that helps me articulate what I need to say when I need to say it.

Mr. DURBIN. That is not one of the luxuries we have in this job, is it?

Ms. O'BRIEN. No. That is right.

Mr. DURBIN. Let me ask you one specific question, if I may, and then turn it over to my colleague here.

You said that you have concerns about NAFTA undermining consumer confidence in our food supply. Tell me what you mean by that?

Ms. O'BRIEN. Well, what I mean by that is that in our country we have—I would say very stiff, strong regulations on pesticides and herbicide use. And those farmers that use those materials have to pass—every year have to go through a pesticide applicator's quiz, in the spring they have them. And so we have very strong regulations.

When we are talking about Mexico, they do not have in place regulatory system that can check on farm. And the Secretary of Agriculture in North Dakota, Sara Vogel, has expressed these concerns quite strongly in that she knows the system there and she has very good backing, and that they do not have that system in place. So what we are afraid of is that those vegetables and fruits and milk, BGH is used in Mexico, those things that will be coming into our country, we will have to be competing with that to begin with and the other thing is then we will be jeopardizing our own food safety system that we have put in place here by bringing in lesser quality and more residue laden vegetables and fruits.

Mr. DURBIN. This subcommittee is going to be traveling to Mexico in just a couple of weeks to take a look at the agriculture and ask some of the questions that you have raised. I understand 50 percent of the Mexican farmers grow corn today.

Ms. O'BRIEN. Yes.

Mr. DURBIN. I guarantee you if NAFTA is implemented at the end of ten years our folks in Iowa and Illinois are going to blow them away. We know how to do this pretty well and it is good fortune to the Mexicans to have such a bountiful supply and, of course, the misfortune of those who are presently farming growing corn——

Ms. O'BRIEN. Will be displaced.

Mr. DURBIN [continuing]. Wondering where their next opportunity is going to be.

Ms. O'BRIEN. And from indications of things that I have read is that they will be migrating into the north and so there are all sorts of implications of those people being displaced on their land.

And I do not think as an Iowa farmer or an Illinois farmer, I do not think that it is the intention of our farmers to put those farmers out of business.

Mr. DURBIN. But market forces will do that.

Ms. O'BRIEN. That is right. I think we need fair trade. I am not saying we do not need—we should not trade at all but the implications of NAFTA at this point I think are—it seems to me the beneficiaries of the NAFTA agreement are the large grain traders that get a cheap product, a cheap raw material, off of my farm.

Mr. DURBIN. Let me say in closing that I know it involved great personal sacrifice for you to be here and we do appreciate it very, very much.

Mr. Peterson.

Mr. PETERSON. Yes, Mr. Chairman, if I may.

Those Mexican farmers are going to be raising oranges and tomatoes and other commodities that are displacing my farmers in Florida, as a matter of fact.

Ms. O'BRIEN. That is right.

Mr. PETERSON. But I was raised in southeast Iowa, as a matter of fact, my mother and dad were probably raised very near where you live. And you have very succinctly identified the problem in agriculture in the United States. And that is the decision, it seems to me, that has to be made of whether or not we are going to tolerate family farms.

We almost have to make a decision here ultimately, are we going to attempt to keep you in business or are we going to say we cannot afford you?

Ms. O'BRIEN. Right.

Mr. PETERSON. And then you have to make the decision of whether or not you can afford to do it. But you also bring up, and I think very well, that rural America is every much impoverished as any urban city inner city. My district, is and I suspect your district maybe. It is appalling and it is something that we have to somehow really aggressively pursue this with the American people because I think they do not know.

Ms. O'BRIEN. I agree.

Mr. PETERSON. It is a frightening circumstance. It is a problem of huge magnitude. And the folks that are out there working in it, they are working every day 15 hours like you are and they are giving of themselves but they are getting almost nothing in return and is a really devastating experience.

Ms. O'BRIEN. I agree with that entire. And, in fact, there are some counties in Iowa that the poverty rate is 20 to 25 percent, which is every bit as high as in the inner city. And this morning I gave testimony to another committee and there were some people talking about separating the economics and the social part of this and I believe we cannot separate those when we look at Rural America, that we have to combine those and we have to seek out ways to be able to keep our rural America viable.

Mr. PETERSON. I agree. The little town I was raised in, I do not think it even exists any more. Rural America is essentially decaying out of sight.

Ms. O'BRIEN. Right.

Mr. PETERSON. And it is something that we are losing more than just agriculture and orientation, we are losing part of our culture.

Ms. O'BRIEN. Absolutely.

Mr. PETERSON. It is a major concern of mine and I just do not know. I do not have any answers but I applaud your perseverance and we hope we can do something to address it in the years ahead.

Ms. O'BRIEN. I hope that is possible, too. My biggest fear these days is someday people waking up and saying what happened to the farmers and there is less than 2 million of us now. And we are very efficient, we are very good at what we do but I feel like we need to repopulate and we need to have some kind of a homestead act to repopulate a million farmers by the year 2000 instead of seeing this whole degradation. Iowa is slated to lose—in 1987, we had 105,000 farms in the state of Iowa. According to the sociologists, according to all the givens, the age of the farmers and all of the—attrition and everything else that happens, in the year 2000, less than 14 years from now, we are slated to lose 22,000 farms. We are going to have 69,000 farms in Iowa. Well, that means pretty much that I am out, that by that time, 2007, I will have made up my mind that I am not going to stay with it any more. So I think that that is very—you know, who is going to farm? And the farms are getting larger, at this point, the corporations are not buying the land but they get their cheap products, their raw products very cheaply off the land so there is no reason for them to own the land. They can contract us to death and give us as little as they want and maintain us in poverty, really.

Mr. DURBIN. Thank you for joining us.

Ms. O'BRIEN. Okay. You are welcome. Thank you.

[The information follows:]

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TESTIMONY OF DENISE O'BRIEN
VICE-PRESIDENT
NATIONAL FAMILY FARM COALITION
BEFORE THE HOUSE APPROPRIATIONS COMMITTEE; SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE AND RELATED AGENCIES
March 23, 1993

My name is Denise O'Brien. I farm with my husband and three children on a 180 acre farm in Southwest Iowa that has been in the family for four generations. We are diversified with a 30 cow dairy operation, organic fruits and free range chickens that are part of a women's cooperative called Homestead Pride. Unfortunately creativity, diversity, and organic does not translate into profitability and sustainability given the current farm prices we are receiving and our costs of production.

I am the Vice-President of the National Family Farm Coalition (NFFC), an organization comprised of 38 rural advocacy and farm groups in 30 states. I appreciate this opportunity to discuss our concerns for FY 1994 funding.

My comments today focus on five important areas -- **agricultural credit, minority outreach and education, sustainable agriculture research, USDA reorganization, and the FDA approval process for Bovine Growth Hormone.** We are also very concerned that the impending trade agreements have serious implications for the future of family farmers in this country. NAFTA raises serious concerns on how USDA programs can operate to benefit family farmers or consumers when undermined by a "free trade agreement" that could jeopardize both the farm programs and consumer confidence in our food supply.

USDA REORGANIZATION AND APPEALS SYSTEM:

As farmers and farm advocates from around the country, we know that there have been serious problems with both USDA implementation of many programs and its policies for the past twelve years. We hope that this will change quickly.

In 1988, it was farmers who tried to educate their local FmHA office about the regulations for the Agricultural Credit Act of 1987 when they were provided wrong information. In 1991, it took major efforts by farmers and farm organizations to get any real implementation of the **Integrated Farm Management Program (IFMPO) by local ASCS offices**. Farmers were told not to bother to apply - that it wouldn't work on their farms, and wasn't worth the effort. This small yet significant program helps lay the groundwork for more significant policy changes to encourage farmers to shift their farming practices towards rotation and

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less pesticide use, yet less than 100,000 acres has been enrolled in the program. We are concerned that with farm program signup going on right now, and no new state administrators and staff implementing the programs - that we are losing another year for this and other important programs.

We are excited about working with the new USDA and the Congress in ensuring that USDA is in fact "farmer-friendly" at all levels. This means in its delivery of programs, its appeals system, its lending programs and its employees. We are pleased that Secretary Espy suspended some FmHA foreclosure actions in early March pending a new review process. NFFC has written a letter asking for clarification as to how this review process will work.

Training at USDA is essential for employees and farmer borrowers. County Committee members have new roles but lack any real training. We urge USDA to prioritize their outreach to farmers and their training programs to clearly explain the agency policies so that farmers can once again turn to local offices for assistance. We want to ensure that reorganization is done so that it makes sense not just to save $1 billion in the budget book. The Bush Administration "strategic plan" for FmHA needs to be revisited due to its clear direction of eliminating a role for FmHA in both farm and housing lending. We want to ensure that the employee consolidation plans that are supposed to be accomplished by attrition are not accomplished by consolidating sub-agencies where there has been important work performed by career employees. Of particular concern is the low number of women and people of color in many jobs both at the national and local level.

An area of major concern since 1989 has been the operation of the FmHA appeals system. In 1987 a new appeals system was established in the Agricultural Credit Act. It was working very well, overturning nearly 60% of the cases in support of the FmHA borrower, until the independence of the National Appeals Staff was directly jeopardized by the intervention of the FmHA Director. Since that time the appeals process has basically been frozen. Farmers have won appeals that are then ignored by the local FmHA office and other farmers have been waiting months and now years for final decisions. In the 1990 Farm Bill, a new ASCS appeals system was created that was also supposed to be independent yet has failed to work as envisioned by Congress. These problems have been well documented in House Government Operations testimony and three Senate Agriculture Committee hearings in the past two years. Legislation to create an independent USDA appeals system for all agencies - ASCS, FmHA, CCC, SCS - was introduced in August by then Rep. Mike Espy in the House and Senator Conrad among others in the Senate. This legislation is absolutely vital and we urge this Subcommittee to ensure that it is a priority USDA program for FY 1994.

While we know that Secretary Espy has stated his plan to first reorganize in D.C., I still have concerns about the proposed plans for Iowa. The Madigan plan to close local offices was done without any economic analysis. They didn't examine which offices had longterm leases, the length of time for farmers to drive or even more serious - they didn't count into their calculations the

number of guaranteed loans that an individual office is servicing, eventhough their salary review was based on the numbers of farmers that could "graduate" from direct to guaranteed loans. The assumptions used in this formula need to be examined. We are hearing that offices are being moved or closed down and new construction approvals are being made eventhough the process is supposed to be on hold.

AGRICULTURAL CREDIT

Farmers Home Administration: The NFFC strongly supports the **FmHA direct operating loan funding** level included in your FY 1993 Agriculture Appropriations bill and hopes farmers will in fact receive operating funds during the upcoming months. The $850 million level reaffirmed the need for a re-focus on direct lending as a reflection of the failure of the guaranteed loan program for the taxpayer and the farm borrower. We were quite surprised to find out that $279 million of the FY 1992 allocation was not spent in the past fiscal year despite many applications on hand. We can only guess that farmers were ineligible or had been discouraged from applying earlier in the season when President Bush's budget request called for a cut down to $314 million for the direct lending program.

We are concerned that President Clinton's "Vision for Change" document that calls for a 25% cut in FmHA direct loan program ignores the critical need and important role of direct loans for beginning, minority and "limited resource" farmers. We hope that this Subcommittee understands the importance of increasing FmHA direct loans to meet needs, not cutting them. Personally we have tried to obtain FMHA direct operating funds for years. We are consistently told that we won't qualify and should not bother applying. This year, however, we are applying since we have absolutely no other source of credit. Our machinery needs repair and/or replacement to maintain our operation. In my area, a local bank just went out of business leaving 43 additional farmers without a local bank. Repeated statements that farmers should be eligible for guaranteed loans ignores both the reality in the countryside where these banks have disappeared and the bottom line on our cashflow which eliminates the possibility of any additional interest payments. Farmers are continuing to pay high interest rates. Many of my neighbors are paying 11 and 12% with very little opportunity to refinance our large debts.

We request that the funding level for **direct farm operating loans be increased to $950 million** to meet significant unmet need. We also urge increases in direct farm ownership - up to $100 million and $100 million in funds for the guaranteed farm ownership interest assistance program. We recommend **$400 million in guaranteed farm ownership and $400 million in guaranteed operating loans with interest assistance.** We would urge that the funding levels for guaranteed operating loans be consistent with real demand so as not to hinder the funding of other programs. We also request a minimum of **$200 million in the credit sales for inventory land** so that limitations on appropriations are not used as a further justification to sell the inventory land to non-FmHA purchasers.

Agricultural Mediation Programs: The NFFC continues to support the federal match for state mediation programs. The programs have shown to be very effective during the past six years in enabling farmers and their creditors to resolve differences and negotiate agreements which reduces both government and farmer losses. We remain concerned however, that the effectiveness of mediation varies widely among the states due both to the type of program in place as well as the participation of other governmental agencies, most notably Farm Credit System and the Small Business Administration. We urge that mediation be considered for all adverse decision within USDA as a prelude to the appeals process.

In Iowa, we have a very effective mediation program that enables farmers to have a fair meeting to try and reach the best conclusion possible. I know from our Credit Committee members that those states lacking a state mediation program results in increased concerns at both the farmer and lender level.

We urge the Subcommittee to appropriate at least **$6 million for** FY 1994. This level would accomodate increases in state program requests, the increased match as well as the increased demand for programs that results from the processing of the over 30,000 delinquency notices that were sent out in June 1992 yet to date have had no action.

Minority Outreach and Education: The 1990 Farm Bill established a new program to expand outreach and education to minority farmers through community based organizations and educational institutions. This type of program is one step in addressing the crisis of minority land loss facing this country. We strongly urge this Subcommittee to appropriate the **$10 million per year** authorization level to try and make a real difference in this area. Last year, $1 million was appropriated through the Extension Service. The call for proposals was recently published in the Federal Register. While we are pleased that this small level of funding was included, we urge that the $10 million be appropriated directly to ensure that the other criteria outlined in the 1990 Farm Bill to fund Section 2501 of the Farm Bill.

SUSTAINABLE AGRICULTURE INITIATIVES:

The NFFC strongly urges the Subcommittee to appropriate funds for new programs established in the 1990 Farm Bill that establish new directions in both basic and applied agricultural research. A key component is the dissemination of this information to farmers and consumers nationwide.

Sustainable Agriculture Research and Education (SARE): We urge funding for the Sustainable Agriculture Research and Education program (SARE) **at $30 million.** The SARE/LISA program has been funded since 1988, yet continues to provide funding for less than 10% of the eligible programs. It is a unique initiative and partnership between farmers, research, non-profit organizations and educational institutions that needs to be expanded significantly during the next two years to lay the groundwork for more extensive policy debate and changes in the 1995 farm bill.

Organic Certification: NFFC supports adequate funding levels for the **National Organic Standards Board (NOSB)** to both accomplish its goals and to ensure adequate public participation in the process. Last year's cutback in funds curtailed the public hearing and meeting process. We hope that the definition and certification program will be established and be responsive to the needs of small and medium sized farmers.

CONCLUSION:

On behalf of the NFFC, I urge you to fund these priority programs for FY 1994 within USDA. I also want to raise our concerns about the pending approval of bovine growth hormone. The failure of adequate response to the important issues raised in the August 1992 GAO report on both animal and human health impacts needs to be addressed. I urge this Subcommittee to assess FDA's research plans on these important areas. My future as a dairy farmer depends on consumer confidence in milk and the ability to compete by receiving a fair price for the product.

For family farmers trying to survive the 1990's, these are programs that make a difference in our lives - whether it's access to FmHA credit programs, mediation of disputes or outreach to minority farmers who have often been ignored in the delivery of USDA programs. A redirection of scarce federal research funds sends a clear signal that there should be alternatives to the existing agricultural system - looking towards options that are both economically and environmentally more secure.

Again, I thank you for this opportunity to present our concerns and would be happy to answer any questions.

FDA PROGRAMS

WITNESS

LYNN MORRISON, THE FDA COUNCIL

Mr. DURBIN. Lynn Morrison of the FDA Council. Welcome.

Ms. MORRISON. Thank you very much.

Mr. DURBIN. We have your statement. We will put it in the record and please proceed.

Ms. MORRISON. Thank you. It is nice to see you again. We miss you in our battles with the budget committee on FDA and the NIE.

Mr. DURBIN. I hope you found some new champions.

Ms. MORRISON. We are trying. You are going to be a tough act to follow.

Mr. Chairman, distinguished members of the subcommittee, I am representing the FDA Council and it is a privilege to appear before you today.

The FDA Council is a broadbased coalition of over 25 consumer organizations, professional societies, representatives from academia and industry who have joined forces to increase the visibility of the complex needs that the Food & Drug Administration faces in its regulatory responsibilities.

This very diverse group speaks with unison in urging the subcommittee to make the resource needs of the FDA a top congressional priority.

I would like to take this opportunity to thank the subcommittee for its support of the FDA over the past several years. FDA has made vital progress in securing and maintaining public health and consumer protection which would not have been possible without the strong support of this committee. This support could not be more critical or more needed in light of vastly increasing FDA regulatory responsibilities and the federal budget deficit problems America faces.

The FDA Council's fiscal year 1994 request is for a full directed appropriation of $842.4 million for FDA's operating budget from this subcommittee and $200 million for FDA headquarters consolidation which has been requested from the General Services Administration budget before the subcommittee on Treasury, Postal Service and General Government.

In the 102nd Congress, legislation was passed allowing for the collection of user fees for drugs and biologics to assist with product review and regulation. We hope that when the Congress considers the administration's user fee request this spring that action is taken to ensure that the FTEs under this legislation are not subject to FTE ceilings or administrative controls and that they be considered unrestricted in order that they can be used for what they were intended, to increase the staff at the FDA.

An increase for salaries and expenses above the fiscal year 1993 appropriation level and user fees collection is recommended to provide for the following critically important programs:

Primarily and of particular importance, implementation of existing legislative mandates. Since 1988, 17 new laws have been enacted, expanding the role and responsibility of the FDA. These laws include regulatory areas such as prescription drug marketing,

nutritional labelling, the Ryan White Act, mammography quality screening, medical devices legislation, the list goes on and on.

In addition, we would like to see some additional funding for training programs as the FDA needs to be able to plan for the future and develop collaborative programs with academia to train regulatory reviewers.

Two-thirds of the FDA's budget is consumed in salaries and benefits. Therefore, when inadequate funding is provided to the agency, programs are not cut back, they are simply non-existent since staff are not hired to carry out the mandates.

With regard to FDA's resource needs, I would just like to highlight a few of the areas that we touch on in our statement.

Additional staff is critical. Every year since 1982 except for 1988, FDA has received less staff than requested of OMB in its budget request. The GAO reports that FDA's analysis of staffing requirements based upon legislative mandates demonstrates a shortfall of approximately 2000 staff. FDA's loss rates for medical officers are substantially higher than government-wide quit rates. Further, FDA's turnover rates for six of nine specialties were higher in fiscal 1988 than in fiscal 1985. Trends exist that clearly document that FDA working conditions have a significant impact on the ability to recruit and retain staff. The median age of FDA's top managers is 48 and an estimated 74 percent of them are expected to leave the agency by 1997.

Another critical area is training programs and clearly we need to see some training programs established. As a result of low salaries and poor working conditions, problems with FDA's ability to recruit and retain scientists and medical review officers has been long recognized. There is no training program except for eye and pediatric oncology programs in conjunction with the National Institutes of Health to train and educate a cadre of regulatory reviewers.

In summary, Mr. Chairman and members of the subcommittee, we recognize that you have many competing demands and many worthy programs to address in your deliberations. The future health and well being of all Americans depends upon the ability of the Food & Drug Administration to have the adequate resources to carry out the mandates you have conferred on it and prepare for the 21st century.

Mr. DURBIN. Thank you, Ms. Morrison.

The staff advised me when I spoke this morning at a meeting in Washington, they advised me for that meeting, that we had increased the staff levels at FDA by 63 percent since 1988. We have calculated here that the appropriation for the FDA has gone up 117 percent in the last 10 years. All of that sounds good in the abstract but when you apply to it your testimony and the responsibilities given by Congress, we know that we are still falling behind.

It is amazing to me that this agency which receives about $780 million, has such awesome responsibilities and the American consumers count on them so much to do a professional job, to approve new drugs and to make sure that our food supply is safe and so many other things as Dr. Kessler has said sitting in that same chair. He was surprised to learn one day that he had the responsibility to assess the value of radar detectors—was it radar guns?

One or the other. It could have been both. But that is an example of where they are headed.

We are trying to work with them. I am very happy with the team that is in place out there. I feel they are responsive and I have a good relationship with them. We are going to try to help them. I think that the legislative mandates that were sent to them are valuable. I voted for all of them, I believe, and each and every one of them is a defensible advancement in terms of protecting consumers in America. And now we are facing the music.

Ms. MORRISON. Right.

Mr. DURBIN. If we are going to in fact make certain that mammography clinics are staffed by well trained people and have equipment that works so that women can rest assured that with that examination they do know their current status, we have to put the regulations together at HHS and with people out in the field. And we have to do it by October of 1994 according to the legislation, which is no mean feat, I might add.

We are going to try our best to work with you and the FDA Council, a very good group, to make sure that we meet that responsibility.

Ms. MORRISON. We appreciate that.

Mr. DURBIN. Mr. Peterson.

Mr. PETERSON. Nothing.

Mr. DURBIN. Thanks for joining us. We appreciate it.

Ms. MORRISON. Thank you very much.

[The information follows:]

The
FDA Council

Candlelighters Childhood Cancer Foundation

The Upjohn Company

The National Allergy and Asthma Network

SYNTHECELL Corporation

American Medical Association

Merck and Co., Inc.

National Organization for Rare Disorders

Pfizer, Inc.

American Academy of Allergy & Immunology

The Procter and Gamble Company

American Veterinary Medical Association

Cambridge Biotech Corporation

Association for Practitioners in Infection Control, Inc.

Bristol-Myers Squibb Company

American Society of Nephrology

Sandoz Corporation

American Society of Tropical Medicine and Hygiene

Genentech, Inc.

National Multiple Sclerosis Society

Monsanto Company

IMMUNO-U.S., Inc.

Arthritis Foundation

Glaxo Inc.

American Social Health Association

Nestlé USA, Inc.

Joint Council of Allergy and Immunology

Warner-Lambert Company

Cystic Fibrosis Foundation

United States Surgical Corporation

Alliance for Aging Research

The FDA Council
c/o Capitol Associates, Inc.
426 C Street, Northeast
Washington, DC 20002
202-544-1880•FAX 543-2565

STATEMENT OF

LYNN MORRISON
OF
AMERICAN SOCIAL HEALTH ASSOCIATION

ON BEHALF OF THE

THE FDA COUNCIL

BEFORE THE
SENATE APPROPRIATIONS
SUBCOMMITTEE ON AGRICULTURE,
RURAL DEVELOPMENT, AND RELATED AGENCIES

ON BEHALF OF

FUNDING TO ADDRESS THE RESOURCE NEEDS OF THE FOOD AND DRUG ADMINISTRATION

ON MARCH 23, 1993

Mr. Chairman, Distinguished Members of the Subcommittee, I am Lynn Morrison of American Social Health Association, and am here representing the FDA Council. It is a great privilege to appear before you today.

Introduction

The FDA Council is a broad-based coalition of over 25 consumer organizations, professional societies, representatives from academia and industry who have joined forces to increase the visibility of the complex needs that the Food and Drug Administration faces in its regulatory responsibilities. The FDA Council, founded in 1989, started as a result of concern over the expansion of our nation's public and private research efforts leading to improved innovation and increased workload at the Food and Drug Administration (FDA); the ever expanding legislative authorities being ascribed to the FDA; and the virtually static funding base of the Agency. This very diverse group speaks with unison in urging the Subcommittee to make the resource needs of the FDA a **top congressional priority**.

I would like to take this opportunity to thank the Subcommittee for its support of the FDA over the past several years. FDA has made vital progress in securing and maintaining public health and consumer protection, which would not have been possible without the strong support of this Committee. This support could not be more critical or more needed in light of vastly increasing FDA regulatory responsibilities and the federal budget deficit problems America faces.

Summary of Request

The FDA Council's Fiscal Year 1994 request is for a full, **directed appropriation of $842.4 million for FDA's operating budget** from this Subcommittee and **$200 million for FDA headquarter's consolidation**, which has been requested from the General Services Administration (GSA) budget before the Subcommittee on Treasury, Postal Service, and General Government.

The rationale for the request in increased funding for FDA before this Subcommittee is paramount for the Agency to meet its mandates.

In May, 1991 the Advisory Committee on the Food and Drug Administration, previously appointed by Secretary Sullivan, re-convened one year after its original report to evaluate if any of its original recommendations had been addressed. In their final report they stated, "The FDA has been placed in an almost untenable position in the past decade as Congress has relentlessly added new responsibilities without providing the resources to carry them out.....Alarmingly, the Agency faces changes ahead that are likely to be even more dramatic than those that have already occurred."

In the 102nd Congress, legislation was passed allowing for the collection of user fees for drugs and biologics to assist with product review and regulation. When the Administration transmits it user fee request, we hope that when the Congress considers the Administrations user fee request this spring, that action is taken to ensure that the FTE's under this legislation is not subject to FTE ceilings or administrative controls, and that they be considered over and above and unrestricted in order that they can be used for what were intended--staff at the FDA. The

FDA Council recommendation outlined here, provides for programmatic increases critical to FDA's effectiveness which were not considered, nor intended to be considered, by the recently passed user fee legislation.

An increase of for salaries and expenses above the FY 1993 appropriation level and user fees collection is recommended to provide for the following critically important programs:

- more foreign inspection -- which is more important as the United States moves into trade harmonization with our trading partners;
- the FDA Center for Devices and Radiological Health (CDRH) to implement the Safe Medical Devices Act (SMDA) of 1990 to invest in research and provide technical assistance to manufacturers;
- the Nutrition Labeling and Education Act (NLEA) in order to train people how to implement the Act and how to read/use the new labels;
- training programs, as the FDA needs to be able to plan for the future and develop collaborative programs with academia to train regulatory reviewers;
- the Clinical Pharmacology Program;
- implementation of mammography screening legislation; and
- the off labeled use project, in which 15 full-time positions (FTE's) are need.

Two-thirds of the FDA's budget is consumed in salaries and benefits. Therefore, when inadequate funding is provided to the Agency, programs are not cutback, they are simply nonexistent since staff are not hired to carry out the mandates.

About FDA's Resource Needs

The Food and Drug Administration is a unique resource and has the responsibility to protect the health and welfare of this nation's citizens. It is recognized and considered unparalleled the world over. The personnel of the FDA are highly talented individuals who have unswervingly addressed the growing mandates of the Agency over the past decade. However, serious infrastructure problems have prevented the Agency from flourishing over the past decade. Congress has come a long way in addressing many of these needs; but much remains to be done to support the FDA meet its current and future challenges. Specifically, FDA desperately needs to:

* consolidate its facilities;
* increase the numbers of quality staff;
* provide more adequate training; and
* furnish much needed equipment and instrumentation.

Space and Facilities

In 1991, subsequent to the passage of the FDA Revitalization Act, funds were appropriated by Congress to begin planning for consolidation of FDA headquarters. Now that engineering and design plans have been completed and environmental impact assessments are underway, continued appropriations are vital to improving the effectiveness of the FDA.

Staffing

Additional staff, beyond those achieved through user fee collections, are vital to maintain the integrity of the existing programs of the FDA and enable them to fully respond to existing and future Congressional mandates.

* Every year since 1982, except for 1988, FDA has received less staff than requested of OMB in its budget request.
* The GAO reports that FDA's analysis of staffing requirements, based upon legislative mandates, demonstrates a shortfall of approximately 2000 staff.
* FDA's loss rates for medical officers are substantially higher than government-wide quit rates. Further, FDA's turnover rates for six of nine specialties were higher in fiscal year 1988 than in fiscal year 1985. Trends exist that clearly document that FDA working conditions have a significant impact on the ability to recruit **and retain** staff.
* The median age of FDA's top managers is 48, and an estimated 74 percent of them are expected to leave the agency by 1997.

Training

Training programs in research universities and in collaboration with the National Institutes of Health need to be established to develop a cadre of trained experts to assist the FDA in keeping pace with emerging technologies.

* As a result of low salaries and poor working conditions, problems with FDA's ability to recruit and retain scientists and medical review officers has been long recognized.
* There is no training program, except for eye and pediatric oncology programs in conjunction with the National Institutes of Health, to train and educate a cadre of regulatory reviewers.

Equipment and Instrumentation

Communications systems must be put into place to facilitate discourse between FDA offices and industry to conduct review of product applications.

* Database systems to computerize drug applications are still in preliminary phases, so FDA staff must resort to storing applications in warehouses, which greatly increases processing time.

SUMMARY

Mr. Chairman, Members of the Subcommittee, we recognize that you have many competing demands and many worthy programs to address in your deliberations. The future health and well being of all Americans depends upon the ability of the FDA to have the adequate resources to carry out the mandates you conferred on it ... and prepare for the 21st Century.

I hope that you will keep this single factor utmost in your consideration, and urge that you not abandon the FDA as you are contemplating the fiscal priorities of the 1994 budget.

Thank you for the opportunity to present this information before you. I will be happy to answer any questions that you may have.

FDA PROGRAMS

WITNESSES

E. DONALD GRIFFIN, ANIMAL HEALTH INSTITUTE
RICHARD H. EKFELT, PRESIDENT, ANIMAL HEALTH INSTITUTE

Mr. DURBIN. E, Donald Griffin and Richard Ekfelt with the Animal Health Institute.

Thank you for your patience. I know you have been sitting there waiting.

Mr. GRIFFIN. That is fine, Mr. Chairman. I have enjoyed it.

My name is Don Griffin. I am Vice President of the Agricultural and Veterinarian Division of Merck & Company but today I am appearing as the Vice Chairman and member of the board of directors of the Animal Health Institute. I am accompanied today by Dick Ekfelt, who is the President of the Animal Health Institute. We appreciate this opportunity to testify on the 1994 appropriations for the Food & Drug Administration.

The Animal Health Institute is a national trade organization that represents the manufacturers of animal health products, pharmaceuticals, vaccines, feed additives, that are used in modern food production and the medicines that keep our pets healthy.

We represent a small and specialized industry with approximate annual revenues of $2.5 billion. Compared to our human counterparts, a $50 million animal drug is considered a blockbuster. But each year we spend more than $400 million and reinvest into research and development of new drugs.

The FDA and its Center for Veterinary Medicine pervasively regulates our industry and are an integral part of our existence.

As you mentioned several times, last week Commissioner Kessler was here and testified before this subcommittee about the problems facing his agency and the majority of his time and the majority of questions asked by the subcommittee dealt with issues affecting human drugs and medical devices.

Mr. Chairman, some of the needs and concerns of the human health and the animal health industries are very different and our organization feels that it is vital that Congress consider these differences before decisions are made that affect our industry's future.

The most important issue facing our members as well as the animal producer groups and veterinarians is drug availability. Since 1982, we have seen a decrease in the number of new drug approvals in every year except one. During the past three years, only five new chemical entities have been approved.

Imagine if you will a pipeline clogged at one end with reams of papers and hours of uncompleted reviews and that is the state of the animal drug approval process in FDA's hands. AHI members have spent literally millions of dollars on hundreds new products on hold somewhere in the process.

F.D.A. claims the problem is a lack of resources, which Dr. Kessler detailed in his testimony here on March 16th. The proposed solution was the implementation of user fees.

Fees on human drug applications were instituted through the enactment of the Prescription Drug User Fee Act and FDA testified

that they have requested $36 million in the upcoming supplemental to create the infrastructure to create these funds.

We would like to make two points very clear.

The first point is that Congress did pass and the president enacted into law with the Prescription Drug User Fee Act language that requires the FDA and CVM to study the issue of user fees for animal drugs to determine whether they would in fact expedite the approval process.

This animal drug specific study is not scheduled for completion until January 1994. AHI and its member companies strongly believe that this review should be allowed to continue with ample opportunity for dialogue with the industry.

And the second point that needs to be stressed is the congressional intent with regard to user fees.

Regardless of the type of fee discussed, whether for the Coast Guard, energy, meat inspection, public lands, these fees a both additive and earmarked. They are additional dollars, not replacement funds, for appropriations. The money collected by user fees is intended to provide fairly specific intangible benefits for the individual or industry required to pay.

The user fees assessed on human pharmaceuticals are such an addendum to the FDA budget with dollars generated earmarked to expediting the approval process for human drugs.

However, Dr. Kessler has made it abundantly clear that all future user fees will be used for deficit reduction. President Clinton's projections credit FDA with more than $1 billion in new and additional fees over the next four years. This policy of fees for debt is unacceptable.

We support deficit reduction but the collection of user fees with no promises of change in management systems or the drug approval process and with the likelihood of no additional personnel to expedite reviews will not help animal agriculture, animal practitioners or the animal health product manufacturers.

Approvals have declined because of the systems and the management practices used by FDA and the CVM and an increase in fees with no tangible benefit to our companies is simply a tax, no different from the other corporate tax increases under consideration by Congress.

A.H.I. members cannot support paying more money into a system that does not facilitate the approval of new products. If such a system is forced upon the industry, many companies will be ultimately forced to simply walk away from product lines and severely hinder the future availabilities of products essential to animal health care. This will mean fewer jobs, few products available to the food animal producers and veterinary practitioners, increased costs in food animal production and ultimately hurt consumers and the economy in general.

We therefore simply ask Congress to consider the very real and very important differences in the animal and human drug industries before making any final decisions on user fees and we thank you for the opportunity to testify on this important issue.

Mr. DURBIN. Thank you, Mr. Griffin. And I do want you to know that we have not overlooked your area of concern here and only because we ran short of time, we were unable to question Dr.

Kessler. It was on our list of questions and will be part of the record. We are concerned, as you are, about these applications and their approvals.

You have a graph, that you have attached to your testimony here——

Mr. GRIFFIN. Yes, sir.

Mr. DURBIN [continuing]. Of the FDA approval of animal health applications from 1971 through 1991. Can you give me some idea of how many applications were pending in each of these years? Are the same numbers being submitted to FDA for approval?

Mr. GRIFFIN. It has been varying but I do have that information just for the last three fiscal years.

Mr. DURBIN. Could you give me that?

Mr. GRIFFIN. In 1991, these are new animal drug applications, new chemical entities, there were—originals received were 28 filed in fiscal year 1991. Because of carryovers, there are still 70 pending. That was fiscal year 1991.

In terms of new animal drug application supplements, which may be a change in manufacturing site, new species, new formulations, new drugs, there were 523 originals received, total actions of 975 and still 391 are pending on that.

Investigational ones received of over 4000 and still over 1000 pending.

It has been building. In fiscal year 1991, as I mentioned, there were 1000 on the investigational new drug applications compared to maybe 100 the year before. It has just been building over time.

Mr. DURBIN. I have tried to follow Dr. Kessler's statements and I may have missed some. You have paraphrased a statement by him that the user fees for FDA would be used for deficit reduction. I cannot recall that specific statement but I can just tell you that I do have the same understanding that you do about the origin of these fees and why they were being assessed at the outset. We have a terrible problem with the deficit but our hope with the user fees was to address a real serious problem at the agency.

Mr. GRIFFIN. We believe on the human side that definitely is their intention on it but for the animal drug side, it was an addendum or a supplement or an add-on to the law when it was passed, that the study would be completed. And we in the industry are currently working with CVM on this management study to in fact see is the problem additional resources that may be needed or is it in management systems and everything that has been going on with it.

And by law we are to report back to Congress, or the agency is, on January 4th of next year. It is our fervent plea that this study not get cut off and all of a sudden user fees just be enacted for the animal drug applications.

Mr. DURBIN. I take it from your testimony you thought this was too long a time for this study to take place.

Mr. GRIFFIN. Time is probably one of the toughest elements of this whole study. To have the study complete and reported back by January 4th of next year it will be a critical effort for us and we do need that time to complete the study.

Mr. DURBIN. So you think that the deadline on it is reasonable.

Mr. GRIFFIN. Yes. It is reasonable, we will make that deadline. And the agency—it is primarily a responsibility of CVM and Dr. Gest to make that time line. And they are working towards that.

Mr. DURBIN. Thank you very much.

Mr. Peterson.

Mr. PETERSON. Nothing.

Mr. DURBIN. Thanks for joining us. We appreciate it.

[The information follows:]

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INSTITUTE

Representing manufacturers of animal health products

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Alexandria, Virginia 22313-1480
Telephone: 703-684-0011
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TESTIMONY of MR. E. DONALD GRIFFIN
VICE PRESIDENT, AGVET DIVISION
MERCK & CO.

Accompanied By
MR. RICHARD H. EKFELT
PRESIDENT, AHI

REPRESENTING the ANIMAL HEALTH INSTITUTE

BEFORE the SUBCOMMITTEE on AGRICULTURE, RURAL DEVELOPMENT, FOOD and DRUG ADMINISTRATION and RELATED AGENCIES

March 23, 1993

1

Mr. Chairman and Members of the Subcommittee, my name is Don Griffin, and I am Vice President of the AgVet Division of Merck. I am accompanied today by Dick Ekfelt, the President of the Animal Health Institute. We appreciate this opportunity to testify on the 1994 appropriations level for the Food and Drug Administration.

The Animal Health Institute is the national trade association that represents the manufacturers of animal health products -- the pharmaceuticals, vaccines and feed additives used in modern food production, and the medicines that keep pets healthy. We represent a small and specialized industry with approximate annual revenues of only $2.5 billion. A $50 million animal drug is considered a block-buster. Each year, more than $400 million are reinvested into research and development of new drugs. FDA and its Center for Veterinary Medicine pervasively regulate the industry, and are an integral part of our existence.

Last week, FDA Commissioner Kessler testified before this Subcommittee about the problems facing his agency. The majority of his time, and the majority of the questions asked by the Subcommittee, dealt with issues affecting human drugs and medical devices. Mr. Chairman, the needs and concerns of the human and animal health industries are very different, and AHI feels it is vital that Congress consider these differences before decisions are made that affect our industry's future.

The most important issue facing our members, as well as animal producer groups and veterinarians, is drug availability. Since 1982, we have seen a decrease in the number of new drug approvals in every year except one. During the past three years, only five new chemical entities were approved. Imagine if you will, a pipeline clogged at one end with reams of paper and hours of uncompleted reviews. That is the state of the animal drug

approval process in FDA's hands right now. AHI's members have literally millions of dollars and hundreds of new products on hold somewhere in the process.

FDA claims the problem is a lack of resources, which Dr. Kessler detailed in his testimony of March 16th. The proposed solution was the implementation of user fees. Fees on human drug applications were instituted through the enactment of the "Prescription Drug User Fee Act," (P.L. 102-571), and FDA testified that they have requested $36 million in the upcoming supplemental appropriations bill to create the infrastructure to collect these funds.

Two points need to be made very clear. The first point is that Congress passed, and the President enacted into law, language that requires FDA and CVM to study the issue of user fees for animal drugs to determine whether they would expedite the approval process. This study is not scheduled for completion until January, 1994. AHI and its member companies strongly believe that the review should be allowed to continue with ample opportunity for dialogue with industry.

The second point that needs to be stressed is the Congressional intent with regard to user fees. Regardless of type of fee discussed -- whether for the Coast Guard, energy, meat inspections, or public lands -- these fees are both additive and earmarked. They are additional dollars -- not replacement funds for appropriations. The money collected by user fees is intended to provide fairly specific and tangible benefits for the individual or industry required to pay. The user fees assessed on human pharmaceuticals are such an addendum to the FDA budget, with dollars generated earmarked to expediting the approval process for human drugs.

However, Dr. Kessler has made it abundantly clear that all future user fees will be used for deficit reduction. President Clinton's projections credit FDA with more than $1 billion in new and additional fees over the next four years. This policy of "fees for debt" is unacceptable.

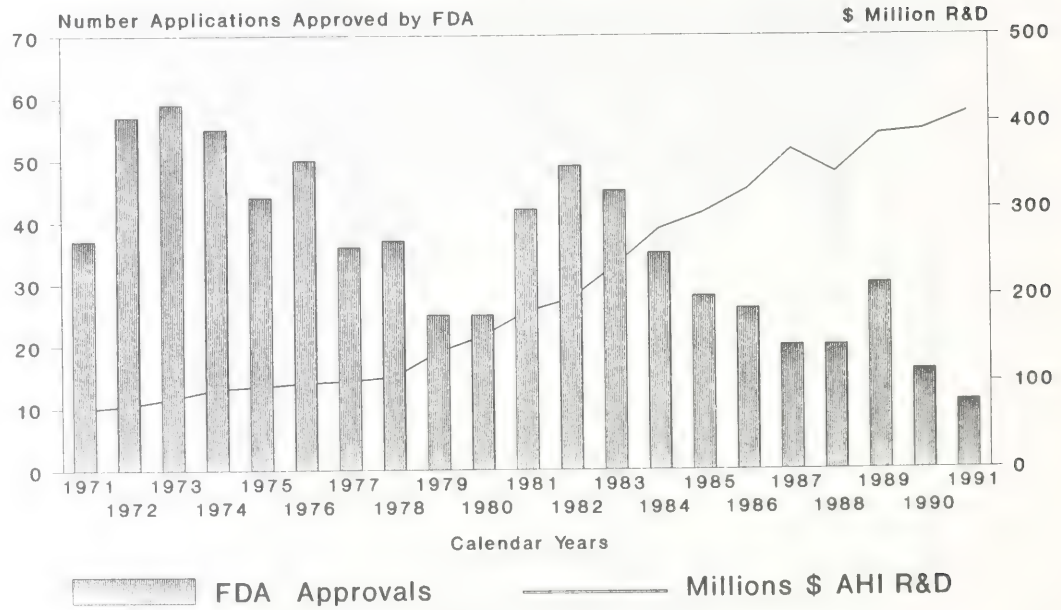
We support deficit reduction. But the collection of user fees with no promise of changes in management style or the drug approval process, and with the likelihood of no additional personnel to expedite reviews, will not help animal agriculture, animal practitioners or the animal health product manufacturers. Approvals have declined because of the system and management practices used by FDA and CVM. An increase in fees with no tangible benefit to our companies is simply a tax -- no different from the other corporate tax increases under consideration by Congress.

AHI cannot support paying more money into a system that does not approve new products. If such a system is forced upon the industry, many companies will be ultimately forced to simply walk away from product lines and severely hinder the future availability of products essential to animal healthcare. This will mean fewer jobs, fewer products available to food animal producers and veterinary practitioners, increased costs in food animal production, and ultimately hurt consumers and the economy in general.

We simply ask Congress to consider the very real and very important differences in the human and animal drug industries before making any decisions on user fees. Thank you for this opportunity to testify on this important issue.

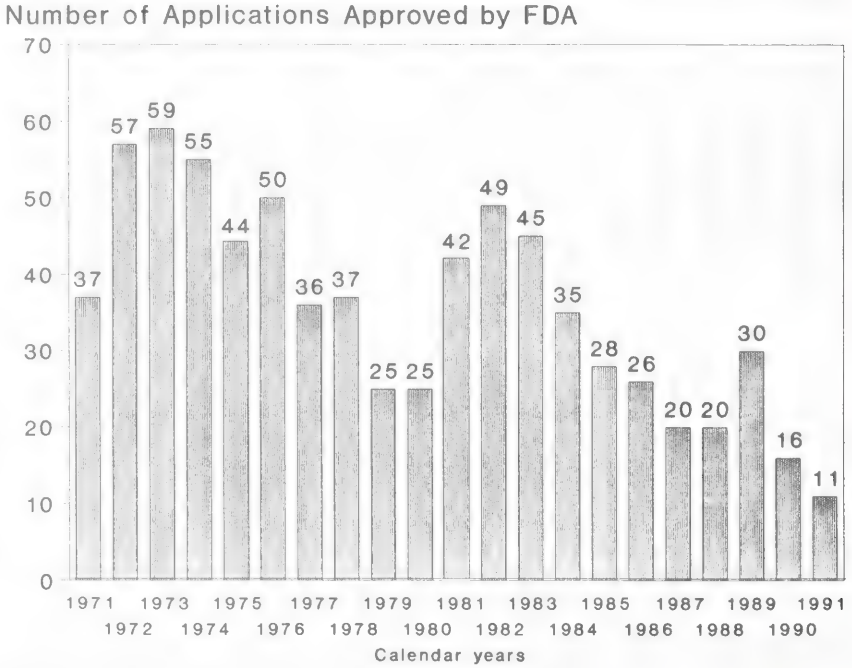
FDA Approval of Animal Health Applications* And AHI Membership R&D Expenses**

1971 through 1991



*Source: FDA (Does not include feed company/blender data)
**Source: Animal Health Institute Annual Reports

FDA Approval of Animal Health Applications*
1971 through 1991



*Source: FDA (Does not include feed company/blender data)

WEDNESDAY, MARCH 24, 1993.

FARM PROGRAMS

WITNESS

GERALD DIGERNESS, PRESIDENT, THE NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

Mr. DURBIN. Welcome. Greetings.

We are convening this meeting of the Appropriations Subcommittee on Agriculture for further testimony from public witnesses.

The first on the list, and I will probably start by mispronouncing the first name, Gerald Digerness, National Association of Conservation Districts. Please have a seat at the table. Your statement will be incorporated in its entirety in the record. We welcome you to summarize it and highlight it as you see fit.

Mr. DIGERNESS. Thank you, Mr. Chairman.

My name is Gerry Digerness. I am President of the National Association of Conservation Districts and I am a dairy farmer in the state of Washington.

I appreciate this opportunity to testify on behalf of the 3000 local conservation districts throughout the United States.

As you may know, conservation districts are local entities of government that work cooperatively with the agencies of USDA that have natural resource management responsibilities. Attached to my testimony are specific recommendations for the over 30 USDA conservation programs and I will not attempt to expand on any of these today but there is one major issue that I do want to call your attention to and that is the reorganization of the USDA.

Major efforts are underway both within the administration and the Congress to reorganize the department in order to improve customer service and increase efficiency and save dollars.

Now, our organization fully supports these goals but we are very troubled with the proposal to merge SCS and ASCS in the Farm Home Administration and other agencies into a single farm service agency.

We believe that USDA must maintain a strong conservation and environmental focus to help farmers, ranchers and other land users meet their production goals in an environmentally responsible manner.

The best way to do this, in our judgment, is to create a single natural resource agency to administer all conservation programs for non-federal lands within the department. It is imperative the conservation and natural resource management remain a top priority within USDA and we fear that this would not occur if SCS is collapsed into a farm service agency.

I thank you again and am pleased to answer any questions you might have.

Mr. DURBIN. Mr. Digerness, I would like to ask you about the CRP program. We are expecting to get a report this week from the General Accounting Office which is going to suggest that they cannot quantify the benefits under that program but it appears that other conservation programs are more cost effective and more permanent.

Do you have an opinion based on your work in this area as to whether the Conservation Reserve Program is our best investment to preserve our natural resources?

Mr. DIGERNESS. I think it is one tool. I cannot answer whether it is the most cost effective but I know we have probably gotten more conservation on the land in the last few years because of the new programs and so I think in that way it has been very beneficial.

We have taken some very highly erodible land out of production and what happens in the future concerns us some after the ten years.

Mr. DURBIN. We spend about $2 billion a year on the Conservation Reserve Program and I am sure you are right about a positive impact. I think what I am asking is whether you are in a position to compare or contrast other alternative conservation techniques that might be cheaper.

Mr. DIGERNESS. I am not.

Mr. DURBIN. Okay. Fair enough.

Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman.

Mr. Digerness, I appreciate your attitude about the new consolidation proposal because I have some trepidation in that area as well because most of us from rural states know that most of our agricultural producers have to travel long distances to deal with these various agencies. You are courting a lot of trouble. But do you have any suggestions about how to consolidate or to coordinate and make these field offices more efficient?

Because what is happening to us is we are losing field function at the expense of maintaining a solid core somewhere in the district office or in the area office.

Mr. DIGERNESS. Right. Yes. I agree with you, we need to send a strong message that American agriculture is doing a job and is concerned that the American people know that we are doing a job for the environment.

I think we have to some way get more of our dollars down and on the land and making things happen and less in pushing paper around and we have a proposal in to reorganize. We have to consolidate the number of our conservation programs. They are scattered and probably inefficient. I think we can do a lot to combine those.

I think we need to have a single agency that has environmental responsibility within USDA so the American public does know that agriculture feels this is an important issue.

Mr. SKEEN. Has this program been published?

Mr. DIGERNESS. Yes.

Mr. SKEEN. I would like to have it. I think the committee as well as our own offices would like very much to have it.

Thank you. We appreciate your testimony and your being here today.

Thank you, Mr. Chairman.

Mr. DURBIN. Thanks, Mr. Skeen.
Mr. Myers.
Mr. MYERS. I have no questions.
Mr. DURBIN. Mr. Digerness, thanks for joining us.
Mr. DIGERNESS. Thank you.
[The information follows:]



STATEMENT OF
THE NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS
PRESENTED TO THE
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE AND RELATED AGENCIES
ON
FISCAL YEAR 1994 APPROPRIATIONS FOR USDA AGENCIES
MARCH 24, 1993

The National Association of Conservation Districts is pleased to present the Association's FY94 funding level recommendations for several of the agencies within the United States Department of Agriculture that have conservation programs.

Conservation districts have been coordinating and carrying out a variety of natural resource programs at the local level for more than 50 years. Many of these programs are executed in cooperation with federal and state agencies that have natural resource responsibilities. Therefore, our membership feels it is very important for us to share our federal funding recommendations for these programs.

The following general comments, observations and recommendations are offered for your consideration.

As you are aware, there are extensive efforts underway to reorganize the U.S. Department of Agriculture and many of its agencies. NACD strongly supports efforts to streamline USDA's operations, improve the efficiency of the Department and enhance the delivery of services at the field level. It is clearly in the best interest of the agriculture and conservation communities, as well as the American public, to use taxpayer dollars in the most cost-effective manner possible. However, we believe the Office of Management and Budget reorganization proposal could seriously undermine not only the basic structure of USDA, but the local partnerships that have taken more than fifty years to build. The Office of Management and Budget is proposing the concept of a "Farm Services Agency" which consolidates a number of USDA's functions and agencies. Although this concept has merit, we're concerned about the implications for conservation.

NACD feels America must have a Department of Agriculture that maintains a strong conservation and environmental focus to help farmers, ranchers and other land users meet their production goals in an environmentally responsible manner. Therefore, we feel that Congress and the Administration should work toward creating a new USDA Natural Resource Agency to administer all USDA conservation programs for nonfederal lands. We further believe that USDA production adjustment and loan programs should be administered separately from its natural resource programs, but with adequate oversight to ensure economic assistance programs are

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consistent with the department's conservation programs. We believe such an effort will result in increased efficiency and savings, elimination of redundancy and improved clientele service. As funding requests for these consolidation proposals come before the committee, we request your careful consideration of the impact on USDA's natural resource responsibilities.

Soil Conservation Service

NACD appears before the committee today requesting higher funding levels for conservation programs than ever before. In the midst of massive budget and spending cuts facing the Congress, we realize that our timing could not be worse. The levels recommended, however, are representative of those needed to meet various Congressional mandates. Conservation districts have been diligently striving to assist by devoting large amounts of local human and fiscal resources to fill this void of needed assistance. SCS has entered into memoranda of understanding with nearly 3,000 local conservation districts to provide assistance needed in addressing local conservation priorities. Each year local districts divert more resources away from local priorities to address federal mandates.

Our biggest challenge today remains meeting the resource planning and technical assistance requests from farmers and other landusers. Several federal programs require SCS to provide landusers with the conservation planning and technical assistance on croplands, range and pasture lands, surface-mined land, urban erosion and sediment problems, and others. However, no programs demand more staff attention than implementation of the 1985 and 1990 Farm Bills.

The "conservation compliance" provisions of the 1985 and 1990 Farm Bills have created a workload that none of us could have imagined. As farmers continue to implement conservation plans as required to remain eligible for various USDA programs, the workload continues to increase dramatically. The result has been severe staff shortages and the inability of the agency to meet its obligation under federal law, to both landowners and conservation districts.

Although the workload generated by the 1985 and 1990 Farm Bills remains the greatest challenge, it is imperative to remember the other responsibilities of the conservation delivery system focused around the Clean Water Act, Endangered Species Act, Coastal Zone Management Act as well as state erosion control laws.

The following illustrates the current workload need:

* 60 million acres of conservation compliance plans must be applied, and an additional 80 million acres of maintenance requiring 5,000 staff years per year, over the next five years. Another 500 staff years are needed to conduct status reviews on conservation compliance plans to ensure they are being implemented.

* 300 staff years are needed to service the 90 water quality hydrologic unit area initiatives (HUA) and demonstration projects in progress; 90 additional HUAs requiring another 300 staff years are needed to remain on schedule with USDA's water quality initiatives.

* 2.5 million acres must be brought into the Conservation Reserve Program by the end of

1995 to meet the goal of the 1985 Farm Bill. More than 750 staff years of technical assistance will be needed to develop conservation plans for these lands.

* 1 million acres of wetlands must be restored over the next three years -- 1,500 staff years will be required to complete the restoration.

NACD urges the subcommittee to reexamine current funding levels for the Soil Conservation Service relative to the workload mandated by law, and by obligations to state and local conservation district programs. NACD believes that a total appropriation of $1,464.1 million is needed for SCS to adequately cover program needs. NACD specifically recommends an increase in conservation operations to $914.7 million, including a $265 million increase for conservation technical assistance. This would fund 6,000 needed staff positions to service the field office workload at the local level. Of this amount, NACD requests that $50 million be directly allocated to conservation districts to help offset costs in implementing federal conservation programs and ongoing conservation initiatives at the local level.

For watershed planning and operations, NACD recommends $15 million for planning and $345 million for operations. A number of our existing structures are in need of repair. This level would provide the agency funds to preform needed repairs to ensure proper water management and flood control structures. To support new Resource Conservation and Development areas, NACD recommends funding at $50 million. NACD also recommends full funding of the Great Plains Conservation Program at $40 million. To address the increasing need for conservation assistance for the nation's grazing lands, NACD is requesting that a new, line-item be created within the agency's budget to promote grazing lands conservation. Additional recommendations are contained in our line item recommendation chart.

AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE

Within the ASCS there are programs which are vital to our federal conservation effort. NACD recommends the following appropriations:

* $2,130 billion for the Conservation Reserve Program to fund 39.6 million acres for FY94 (includes $1,830 billion for existing contracts, $50 million for 1994 contracts, and $50 million for 1994 cost-share payments).

* $290.2 million for the Wetland Reserve Program to support 50,000 acres under existing contracts, plus a 350,000 sign-up FY94.

* $275 million for the Agricultural Conservation Program (includes $225 million for ongoing ACP, and $50 million earmarked for the Water Quality Incentives Program).

Attached to our testimony are line item recommendations for select programs within the Department of Agriculture. We appreciate the opportunity to convey our recommendations to you on these very important areas.

NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS
FISCAL YEAR 1994 FEDERAL FUNDING RESOLUTION

	FY93 ADMINISTRATION PROPOSAL	FY93 NACD RECOMMENDED	FY93 ENACTED	FY94 NACD RECOMMENDED
		(in millions of dollars)		
SOIL CONSERVATION SERVICE				
Conservation Operations				
Conservation Technical Asst.	486.2	742.8	490.2	755.2 (1)
Soil Surveys	72.5	75.0	72.6	75.0
Snow Surveys & Water Forecasting	5.7	6.0	5.7	6.0
Plant Material Centers	8.1	8.5	8.0	8.5
Grazing Lands Conservation				20.0 (2)
Stewardship Plans				50.0 (3)
(CO Subtotal)	572.5	832.2	576.5	914.7
River Basins	10.1	13.2	13.2	30.0
Watershed Planning	6.4	15.0	9.5	15.0 (4)
Watershed Operations	152.9	250.0	228.3	345.0 (5)
Wetland Acquisition				10.0 (6)
Project Rehabilitation				60.0 (7)
RC&D's	23.6	50.0	32.5	50.0 (8)
Great Plains	25.3	40.0	25.2	40.0 (9)
TOTAL SCS	791.4*	1200.5	885.4*	1464.7
	(*Totals are approximate due to rounding)			
AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE				
Agricultural Resources Conservation Program (ARC)				
Conservation Reserve	1,798.6	1,880.0	1,578.5	2,130.0 (10)
Wetlands Reserve	160.9	50.0	0	290.2 (11)
Agricultural Conservation Program	125.0	275.0	194.4	275.0 (12)
Forestry Incentives Program	12.4	25.0	12.4	25.0
Water Bank	11.4	20.0	18.6	20.0
Colorado River Salinity Control Program	14.8	15.0	13.8	15.0
AGRICULTURAL RESEARCH SERVICE				
Soil & Water Conservation Research	82.9	98.5	81.9	98.5 (13)
STEEP II Research		0.5	0.6	0.6 (14)
COOPERATIVE STATE RESEARCH SERVICE				
Hatch Act (grants to states)	168.3	175.0	168.8	175.0
McIntire-Stennis (forestry)	15.8	20.0	18.5	20.0
Rangeland Research	0	1.0	0.5	1.0
Sustainable Agriculture Research & Education (SARE)	4.5	15.0	6.7	15.0
National Research Initiative	150.0	200.0	97.5	200.0 (15)
COOPERATIVE EXTENSION SERVICE				
General Formula Funds	262.7	275.0	262.7	275.0
Earmarked Programs				
Water Quality	13.5	16.0	11.4	16.0
Pesticide Impact Assessments	3.6	4.0	3.4	4.0
Pesticide Applicator Training	0	10.0	0	10.0 (16)
Integrated Pest Management	10.0	12.0	8.2	12.0
1990 Farm Bill	0	50.0	0	50.0 (17)
Renewable Resources Extension Act	0	15.0	2.8	15.0
FARMER'S HOME ADMINISTRATION				
Rural Community Fire Protection	0	7.0	3.5	7.0
Soil & Water Loans-Direct	0	14.0	2.3	14.0
Soil & Water Loans-Guaranteed	0	2.0	1.4	2.0
Watershed Protection & Flood Prevention	0	8.0	4.0	8.0
RC&D Loans	0	1.2	0.6	1.2

FY94 NACD FEDERAL FUNDING RESOLUTION - EXPLANATORY NOTES

(1) **CONSERVATION TECHNICAL ASSISTANCE** (755.2 m) = FY93 appropriations (490.2 m) + inflation factor (25 m) plus 6000 new staff positions (240 m) to service field office workload. Of this amount (50.0 m) should be allocated directly to conservation districts to offset costs to implement federal conservation programs and support ongoing conservation initiatives at the local level. NACD's highest funding priority is adequate funding for Conservation Technical Assistance.

(2) **GRAZING LANDS CONSERVATION** (20 m) = Reflects NACD policy supporting new line item for grazing land technical assistance.

(3) **STEWARDSHIP PLANS** (50 m) = Establishes new line item to be transferred from SCS to districts under cooperative agreements to provide complete conservation plans for landowners which utilize land and associated resources based on capability.

(4) **WATERSHED PLANNING** (15 m) = Amount needed to service current applications and contracts for water quality planning work in priority watersheds.

(5) **WATERSHED OPERATIONS** (345 m) = Amount needed to maintain program, service backlog of projects ready for construction and implement new initiatives. PL-566 Projects: 250 m; PL-534 Projects: 75 m; Emergency Watershed Protection: 20 m.

(6) **WETLAND ACQUISITION** (10 m) = Using the authority granted to PL-566, districts will help local sponsors acquire wetland or floodplain easements to retain excessive floodwaters, improve water quality and provide habitat for fish and wildlife.

(7) **PROJECT REHABILITATION** (60 m) = Additional special funding provided to assist watershed project sponsors with rehabilitation of structural measures that are reaching the end of their design life.

(8) **RC&D'S** (50 m) = Increased funds to be used to support new RC&D areas and rural development in low income areas.

(9) **GREAT PLAINS** (40 m) = Amount authorized under the 1990 Farm Bill.

(10) **CRP** (2,130 m) = Amount needed to fund a 39.6 million acre reserve in FY94.

- Existing contracts	36.6 million acres @ $50/acre	1,830 m
- 1994 contracts	3 million acres @ $50/acre	150 m
- 1994 cost share payments	3 million acres @ $50/acre	150 m

Approx. 65 million expected in carryover funds.

(11) **WETLANDS RESERVE** (290.2 m) = Funds required to support 50,000 acres under existing contracts plus a 350,000 signup in FY94.

(12) **AGRICULTURAL CONSERVATION PROGRAM** (275.0 m) = (225 m) for ongoing ACP + (50.0 m) earmarked for Water Quality Incentives Project.

(13) **SOIL AND WATER CONSERVATION RESEARCH** (98.5 m) = Increased funds to be used to improve wind and water erosion prediction and control technologies; to improve the conservation and efficient use of water; and to develop environmentally compatible management support systems for rangelands.

(14) **STEEP II** (0.6 m) = Research addressing problems associated with the lack of erosion control technology. Program has not previously been a line item appropriation. NACD supports a line item for STEEP II within the ARS appropriation.

(15) **NATIONAL RESEARCH INITIATIVE** (200.0 m) = Funding for USDA sponsored research in the following areas: natural resources & environment, food quality, rural revitalization, and plant and animal systems.

(16) **PESTICIDE APPLICATOR TRAINING** (10 m) = Direct appropriation to fund Extension's pesticide application training program. In previous years, Extension has received a limited amount of pass through funds from EPA to support this program.

(17) **1990 FARM BILL** (50 m) = Funds to be used to support the following new provisions authorized under the 1990 Farm Bill:
- Conservation title implementation -- (10 m)
- Best Utilization of Biological Applications (BUBA) section 1621 -- (10 m)
- Integrated Management Systems (section 1627) -- (10 m)
- Sustainable Agriculture Technology Development and Transfer (section 1629) -- (10 m)
- Rural Development (section 2346) -- (10 m)

FARM PROGRAMS

WITNESS

TIMOTHY W. WARMAN, DIRECTOR OF FEDERAL POLICY, AMERICAN FARMLAND TRUST

Mr. DURBIN. Timothy Warman with the American Farmland Trust. Welcome to the committee.

Mr. WARMAN. Thank you. Good afternoon. I am Tim Warman, Director of Federal Policy for the American Farmland Trust.

Mr. Chairman and members, I appreciate this opportunity, my first, to testify before you and present a summary of our full statement.

AFT's recommendations for both spending increases and decreases will result in a net savings for the federal budget in fiscal year 1994. In general, AFT is convinced that funds currently spent on commodity deficiency payments should be redirected towards conservation practices and agricultural sustainability. This approach could be developed to more adequately support farm income and family farms.

A.F.T. requests funding for the farms for the future act of $50 million. These funds, which the states are prepared to match two to one, will provide for the protection of 58 percent of the agricultural production currently occurring in and around metropolitan areas.

A.F.T. supports $498 million for the Soil Conservation Service operations with the provision that $2 million be devoted to information and technical assistance to state and local governments for methods to protect our best farmland as provided for under the Farmland Protection Policy Act. We would like to see a budget note to this effect.

Funding for a sustainable agricultural research and education program should be increased to a minimum of $30 million. The sustainable agriculture technology development and transfer program should receive $20 million to establish an effective outreach effort functioning in concert with the SARE program to help America develop a more sustainable agricultural system.

A.F.T. supports strongly the goal of enrolling 1 million acres in the Wetlands Reserve program. We recommend a target of an additional 250,000 acres for fiscal year 1994, which will cost approximately $225 million, and yield us savings of $150 million compared to moving that program ahead within the next two years.

A.F.T. recommends restoration of approximately $100 million for a targeted conservation reserve program enrollment of 2 million acres open only for farmers having difficulty meeting conservation compliance requirements.

A.F.T. proposes that funds for this increased enrollment could be generated by allowing farmers who have land in CRP for at least seven years to rebid for lower CRP payments with the provision that haying, grazing and other economic uses would be allowed as long as a permanent cover is maintained.

A.F.T. recommends increasing funding for the Water Quality Incentive Program to $50 million to enable the enrollment of 1 million acres annually.

I believe the CRP recommendation would help address some of your concerns, Mr. Chairman, in making this program more cost effective.

I appreciate the opportunity to present AFT's recommendations for these priority programs and we would be pleased to provide any additional information you could use.

Mr. DURBIN. Mr. Warman, according to your testimony, the American Farmland Trust is dedicated to stopping the unnecessary conversion of farmland to urban uses. That is one of your points.

Can you give me an idea of the number of acres under tillage now compared to 40 or 50 years ago?

Mr. WARMAN. Well, the number of acres under tillage for the entire United States has not changed very much but our major concern is within urban areas of this country where actually more than 50 percent of agricultural production by value occurs and in those areas we have seen dramatic losses of farmland, particularly very high quality farmland because our towns and cities grew up in areas where farming started 200 years ago.

Mr. DURBIN. My second question to you is do you have any suggestions of how we could pay for the Wetland Reserve program changes that you have suggested?

Mr. WARMAN. Well, no. My only suggestion is that if we slow down the size of the Wetlands Reserve program, perhaps we can pay for it over a longer period of time. That goal of acquiring 1 million acres by 1995, if we extend that to 1996 and 1997, we can do it a little bit more gradually.

Mr. DURBIN. Thank you very much.

Mr. Skeen.

Mr. SKEEN. Just one question, Mr. Warman. Has there been any attempt in your group's effort to classify lands as primarily adept for agriculture versus development?

The encroachment of development around urban areas has been one of the real problems in losing a lot of prime agricultural lands. Of course, that maybe the only way a lot of farmers have to bail themselves out of the farming business.

Mr. WARMAN. Yes. In fact, there is underway right now an effort to identify lands across this country at our Center for Agriculture and the Environment and to clarify that very point, that we have a lot of strategic, important, good farmland in urban areas.

Mr. SKEEN. It is particularly an acute problem in irrigated farming areas.

Mr. WARMAN. Yes.

Mr. SKEEN. We are losing an awful lot of lands that were appropriately agricultural lands because of the development and ease of construction. However, more suitable construction sites and development sites for urban communities are available to them but they never select it.

Mr. WARMAN. Yes.

Mr. SKEEN. They have taken the higher price land. I was just curious if that has been one of the elements in your recommendations.

Mr. WARMAN. Yes, it is. I will be glad to provide you with more information about that.

Mr. SKEEN. Thank you. I would appreciate that.

Thank you, Mr. Chairman.
Mr. DURBIN. Mr. Peterson.
Mr. PETERSON. No questions.
Mr. DURBIN. Mr. Myers.
Mr. MYERS. No questions.
Mr. DURBIN. Thanks, Mr. Warman.
Mr. WARMAN. Thank you very much.
[The information follows:]



American Farmland Trust

Testimony of Timothy W. Warman
Director of Federal Policy
American Farmland Trust

Before the House Appropriations Committee; Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies.

March 24, 1993

The American Farmland Trust is a twelve year old nonprofit organization seeking to stop the unnecessary conversion of farmland to urban uses and to encourage agricultural practices which conserve natural resources. The following programs directly influence the rate of loss of farmland through land development, farming practices, and soil and water erosion. AFT's recommendations contain a mix of expenditure increases and decreases which will result in a net savings for the federal budget in FY 94.

On behalf of the American Farmland Trust, I appreciate the opportunity to testify before you.

FARMLAND PROTECTION

AFT requests funding for the Farms For the Future Act of $50 million for FY 94. This program established as part of the Food, Agriculture, Conservation, and Trade Act of 1990 will provide matching funds for State farmland protection programs including those in California, Pennsylvania, New Jersey, Maryland, Vermont, Connecticut, New York, Wisconsin and Massachusetts. These funds which the states are prepared to match two to one will provide the opportunity to curb wasteful sprawl development in and around metropolitan areas and protect the agricultural infrastructure that produces 58 percent of the national agricultural production measured by value.

AFT supports the Administration's request for $498 million for the Soil Conservation Service Conservation Operations Technical Assistance programs with the provision (budget note) that $2 million be devoted to information and technical assistance to state and local governments on methods to protect our best farmland as provided for under the Farmland Protection Policy Act.

SUSTAINABLE AGRICULTURE

To encourage the shift to more environmentally appropriate agricultural practices, funding for the Sustainable Agriculture

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Research and Education (SARE) program should be increased from the FY 93 level of $6.7 million to a minimum of $30 million in FY 94. This will still leave the program 25 percent below the authorized level of $40 million. The SARE program provides research grants on a competitive basis to researchers working on a more environmentally appropriate agricultural system.

The Sustainable Agriculture Technology Development and Transfer program (SATDTP) created in 1990 is another good program that has languished without funds. SATDTP should receive $20 million in FY 94 to implement a nationwide training program for extension agents, and other USDA agency staff in sustainable agriculture concepts and practices and to establish an effective outreach effort functioning in concert with the SARE program helping America develop a more sustainable agricultural system.

SOIL AND WATER CONSERVATION

The Wetlands Reserve pilot program (WRP) implemented in nine states in FY 93 has been a major success in demonstrating the opportunity to effectively reestablish permanent wetlands that had previously been converted to farmland. AFT strongly supports the goal of enrolling one million acres, however we suggest the target date be moved forward one to two years in order to insure the most appropriate lands are enrolled. We recommend a target of an additional 250,000 acres in FY 94 which will require funding the Wetlands Reserve program at approximately $225 million. Funding WRP at this reduced level will provide a savings in FY 94 of $125 million to $150 million.

The Conservation Reserve Program (CRP) has proven to be one of the most effective conservation programs ever developed. AFT recommends the restoration of approximately $100 million in FY 94 for a targeted CRP partial field enrollment of two million acres open only for farmers having difficulty meeting conservation compliance requirements. The 1990 farm bill reserved two million acres for farmers having trouble meeting conservation compliance as a way for the government to share some of the cost. AFT proposes that funds for this increased acreage could be generated from lands that have been in CRP for at least seven years. Landowners could be allowed to rebid at a lower level and also use the land as long as the land is retained in permanent cover. By allowing haying and grazing activities on this rebid CRP land, AFT believes the average cost per acre would be reduced to less than half the current average of $50 per acre. The potential for savings from a relatively small portion of the 15.6 million acres signed up in 1985 and 1986 exceeds $100 million.

The Water Quality Incentive Program (WQIP) is a voluntary, incentive based program to help farmers comply with state and federal environmental laws by providing technical and financial assistance to prevent pollution of surface and ground water. The WQIP is currently being administered as part of the Agricultural Conservation Program where it received $15 million in FY 93. AFT

supports the target of ten million acres enrolled at the rate of two million annually. To begin to approach this goal AFT recommends increasing funding for WQIP to $50 million for FY 94.

COMMODITY PROGRAMS

In general, AFT is convinced the funds currently spent on commodity program deficiency payments to achieve outdated and ineffective supply management, and which also create market distortions, should be redirected toward conservation practices and agricultural sustainability. This approach could be made to more adequately support farm income for family farms. We will work with the Congress to look at the broad spectrum of commodity program and conservation issues and alternatives to develop conservation based income supports in the next farm bill.

In the mean time, we believe Congress can achieve some commodity program cost reductions. For example, by holding strictly to the $50,000 limitation on deficiency payments. To prevent multiple payment, all payments received could be attributed to individuals. The savings achieved should be used to fully fund other existing conservation programs.

CONCLUSION

I appreciate the opportunity to present the American Farmland Trust's recommendations on funding for these priority programs which have the potential to provide critically needed leadership toward developing a more environmentally benign American agricultural system and protecting the resource base for farming today and for future generations of family farmers. AFT feels it is vitally important to strengthen efforts, both local and national, to protect the strategic farmland near urban areas for the many benefits it provides all Americans.

AFT would be happy to provide any additional information the Committee may desire.

FARM PROGRAMS

WITNESS

JAMES W. GARNER, VICE PRESIDENT, NATIONAL ASSOCIATION OF STATE FORESTERS

Mr. DURBIN. James Garner with the National Association of State Foresters. Thanks for joining us.

Your testimony will be entered in the record in its entirety and you are invited to summarize it.

Mr. GARNER. Thank you, Mr. Chairman. My name is James Garner. I am the State Forester of Virginia and I appreciate the opportunity to represent the National Association of State Foresters, of which I am currently vice president.

The National Association of State Foresters represents the directors of the state forestry agencies from the fifty states and three territories. We are responsible for administering the wide range of technical assistance programs and protection for the state and private forests across this country.

State foresters provide a key link in working with and providing assistance to non-industrial private landowners for the management of their forest land for multiple use.

We deliver the network for the state and private forest programs of the U.S. Forest Service which are funded under the Interior appropriation bill. However, there are still some important forestry programs funded through the Agriculture appropriation bill. These include the Forestry Incentive Program, Rural Community Fire Protection, the Renewable Resources Extension Act, McIntire-Stennis Research and the National Research Initiative. Each of these contribute in some way to ensuring the health, productivity and sustainability of the nation's forests.

As you have noted and I appreciate our full statement being entered into the record and so we will dispense with reading it all but it does include specific recommendations for fiscal year 1994 for the programs that I have just mentioned and I hope that these will be considered in your recommendation as your committee deliberates.

But I would like to add a few words about one of the programs in particular that is important to forestry and that is the Forestry Incentive Program. As I mentioned earlier, we provide extensive assistance to the non-industrial private landowner to encourage them do good and wise forest management practices. And sometimes the obstacles in promoting sound practices or even just reforestation appear to outweigh the incentives and landowners who are interested in making a long-term investment in their forestland face some rather significant risks: cash outlays, long-term investments, unpredictable markets and a protection of that investment over years of time.

We are increasingly concerned, particularly in the south, that a lot of acres are being harvested that the landowners will not be able to reforest. Of these acres that are being reforested, a large percentage of them will neither be replanted nor will they be managed for timber as a commodity. And that is partially because of our encouragement of asking the forest landowners to be good stewards of their forest and we have established a forest steward-

ship program which promotes forest management for multiple resource objectives which are according to the landowners needs and the desires.

With this in mind, we have seen the demand for forest products continue to rise steadily over the past decade and we expect this demand for forest products to continue well into the future. This demand and the ability to supply it means economic health and jobs to the states and to the rural localities across the nation.

Through the cost-share assistance that the Forest Incentive Program provides, these landowners we hope will reforest as well as improve their existing forest stands. And so ultimately this program goes a long ways to ensure future timber supplies will be available to meet the timber needs and the demands of the general public.

In closing, I would like to thank this committee for its consistent and your long-term support of the Forestry Incentive Program. It has meant a great deal to the forestry community and to the private landowners across the nation.

If you have any questions, I will be more than happy to answer them, Mr. Chairman.

Mr. DURBIN. Thank you, Mr. Garner.

We do very little work in this area. As you mentioned earlier, the Interior Committee has the responsibility for the Forest Service, but I am glad you called these programs to our close attention, particularly your statement on the Forestry Incentives Program. I think it makes good sense.

We will keep that in mind as we start our mark-up.

Mr. GARNER. Thank you very much.

Mr. DURBIN. Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman.

Mr. Garner, I appreciate your testimony and particularly in the areas of reforestation. I am a little concerned, too, by how affected are you by what we do here on the federal level either by law or by regulation?

Does that have an effect on the state forestry operations as well?

Mr. GARNER. Absolutely, sir.

Mr. SKEEN. We are driving some of your programs.

Mr. GARNER. And you are providing opportunities to give us something to take to these private landowners as an incentive, either programmatic or financially. And particularly in economic times when they have a great need for money just to live, sometimes the natural resources take second seat. And if we have the opportunity of a program or some financial assistance, it can often sway a landowner from just leaving things alone or doing what is right.

Mr. SKEEN. Well, are there any drawbacks that you are aware of in this association of what we do on the federal level with your operations on the state level? Are they pretty compatible?

Mr. GARNER. You mean other than paperwork?

Mr. SKEEN. Other than paperwork.

Mr. GARNER. No, sir.

Mr. SKEEN. That is a common burden that we all bear.

Mr. GARNER. No, sir.

Mr. SKEEN. Thank you very much for your testimony.

Thank you, Mr. Chairman.

Mr. DURBIN. Mr. Peterson.

Mr. PETERSON. Just to say that I share your concern on the reforestation problems and also the incentives. I see more harvesting right now, I presume, because of the price rise in wood products and I would hope that those landowners would go back and plant again and I am a little concerned that that may or may not occur, so I share your concern and I appreciate your comments.

Mr. GARNER. We are concerned for the long term and we need any encouragement that we can get for these private landowners.

Mr. PETERSON. The south right now is very vulnerable.

Mr. GARNER. Yes, sir.

Mr. PETERSON. In my view.

Mr. GARNER. Yes, sir.

Mr. PETERSON. And so I concur with what you are talking about in Virginia and through the whole Sun Belt. It is very critical.

Mr. GARNER. Yes, sir.

Mr. PETERSON. Thank you, sir.

Mr. DURBIN. Mr. Myers.

Mr. MYERS. Mr. Garner, how does the total number of trees in the United States today compare to 100 years and 200 years ago?

Mr. GARNER. Forestland has remained, just as cropland, acreage-wise, has remained fairly stable since the 1900s in terms of acres.

In terms of volume, we are significantly better off today than we were at the turn of the century. If you go back to 1850, 1860, the forestland of today is greater and the volume and the amount of timber is far greater than it was 100 years ago. Across the country. It varies from part to part.

We just finished a study in Virginia and I can speak a little bit more accurately about Virginia than I can others but we looked at how Virginia stood 50 years ago. We have a million more acres of forest land in Virginia than we had 50 years ago and we have 42 percent more volume of timber than we had 50 years ago.

This has been true, I think, relatively speaking, Mr. Myers, across the south and that is where I know the most of. If you need some detailed figures, we could have them for you by tomorrow.

Mr. MYERS. I do not come from the south. As you know, I come from southern Indiana. Is that close enough to say y'all?

Mr. GARNER. Yes, sir.

Mr. MYERS. Well, I am faced with a problem right now, I have a forester that wants to come in and cut some trees on my farm. I do not know a doggone thing about it, I guess I had better sell them to him, he would probably come in and steal them if I do not. There is a lot of that going on.

Mr. SKEEN. This is the first time you have admitted that you have grown anything. [Laughter.]

Mr. MYERS. I can grow trees and there are fish on my land sometimes.

Mr. GARNER. There are professional foresters in your county that could provide you with some advice. And I would seek professional advice before I did anything.

Mr. MYERS. Thank you.

Mr. DURBIN. This is the first good report we have had from the Myers farm in a long time.

Mr. MYERS. You know, I am so doggone honest, I tell them how farming really is and they are shocked sometimes.

Mr. SKEEN. You told me it was all cockle burrs.

Mr. DURBIN. He has qualified for every disaster payment since I have been in Congress. [Laughter.]

Mr. MYERS. But I have not been able to draw any of them yet. I think I will bring my tin cup next time. Maybe that would be more effective. [Laughter.]

Mr. DURBIN. Mr. Garner, thank you for joining us.

Mr. GARNER. Thank you, Mr. Chairman.

[The information follows:]

The National Association of State Foresters

Testimony

Submitted by the

National Association of State Foresters

to the

House Appropriations Committee
Subcommittee on Agriculture

March 24, 1993

James W. Garner,
Virginia State Forester and Vice President, NASF

The National Association of State Foresters represents the directors of the State forestry agencies for each State and three U.S. Territories (Guam, Puerto Rico and the U.S. Virgin Islands). Collectively, our members are responsible for the protection and management of 80% of the Nation's forest resource -- about 500 million acres of state and private forest lands. NASF thanks the committee for its continued support of forestry related programs in Fiscal Year 1993 and previous years, and we share your commitment to making forestry an integrated part of reinvigorated rural economy.

A primary goal of the NASF is to ensure that Stewardship practices, that is, management practices that ensure the health and quality of the land while at the same time increasing its' productivity, are carried out on America's non-industrial private forest lands (NIPF). The Nation's forests are a renewable resource, capable of delivering multiple benefits if managed wisely and with the future in mind. There are several federal programs in place that assist us in working towards this goal.

444 North Capitol Street NW Washington, DC 20001

The USDA Forest Service's State and Private Forestry program is now being successfully implemented by the State forestry agencies nationwide. We are making significant progress towards the goals of this program, including planting and caring for millions of new trees, and managing existing forests with wildlife, water and other resources in mind. The State forestry agencies are at the forefront of this implementation effort, and we look forward to working with the new Administration to see that these programs continue to meet the needs of rural America while benefiting the environment for all Americans.

Consistent with these goals, several conservation and research programs aimed at achieving balanced management of our forest resources have been funded through this committee. These include the Agricultural Conservation Program (ACP), the Conservation Reserve Program, the Forestry Incentives Program (FIP), and the McIntire -- Stennis research program. NASF continues to support funding for these programs. These programs make important contributions to the protection and management of the Nation's renewable resource base, and to the forest resource in particular.

Rural Community Fire Protection Program (RCFP)

This program is a continuing priority of the National Association of State Foresters. Events over the past several years in California, Florida, and Oregon illustrate that the dangers posed to residents and firefighters in dealing with the wildland/urban fire interface continue to increase as more people settle in these rural areas. Many of these rural communities depend upon rural volunteer fire departments (RVFD's), who often lack adequate training, equipment, and organization to deal with the demands placed on them. The RCFP program provides direct financial assistance to RVFD's to meet these needs. Moreover, these communities will remain disadvantaged as they seek investors and other opportunities for development if they cannot provide adequate fire safety.

In the past, appropriated funds have fallen significantly behind the needs of the States and localities that would benefit from this program. Only a fraction of the country's more than 26,000 RVFD's received assistance through this program. NASF strongly urges that this program be funded at its full authorization level of $7 million for the coming fiscal year.

Renewable Resources Extension Act (RREA)

The Renewable Resources Extension program helps support the Nation's need for continuous supply of forest resources, both commodity and non-commodity. This program facilitates the transfer of needed forestry technology to private non-industrial forest landowners, as well as industries and small businesses engaged in forest management. This program provides education to groups most

actively involved in managing forest, range and related lands. The education provided through such programs as the Logger Education to Advance Professionalism (LEAP) is a critical part of the effort to achieve sustainable, productive use of our Nation's private forest lands.

Although the program continues to be funded significantly below its authorized level, it has been very successful at leveraging funds from States and localities to promote range, wildlife, recreation and education programs. Once again, the NASF recommends funding for this program at $7 million for FY 1994.

McIntire -- Stennis Research

Research is critical to the creation of new technologies designed to increase the efficiency and productivity of forest management. McIntire -- Stennis Research funding provides assistance on a matching basis to land grant colleges, agricultural experiment stations and other public colleges and universities offering forestry education. The program recognizes the needs of States and regions which depend primarily on State universities and the USDA Forest Service to provide research and technology base. This unique partnership has contributed greatly to the productivity and health of our Nation's forests.

NASF recommends that funding for this program be increased to $32.0 million for Fiscal Year 1994. We believe this level of funding will ensure the continued effectiveness of this program in strengthening the role of technology in the effective, multiple use management of our Nation's forest resources.

Agricultural Conservation Program (ACP)

The ACP provides cost-share assistance to landowners who implement practices that prevent soil erosion, protect water quality, and enhance forest resources. Under the forestry section of ACP, tree planting and seeding took place on 119,223 acres of land and 46,705 acres received timber stand improvement treatments. Although this represents only a small percentage of the total ACP budget, these forestry practices make substantial and enduring gains in soil and water conservation.

NASF recommends that the ACP be funded at a continuing level of $195.0 million for Fiscal Year 1994.

Forestry Incentives Program (FIP)

The fact that more acres of forest land are harvested than are reforested every year in many parts of the country is a continuing problem and challenge. The ob-

stacles the small forest land owner faces when considering reforestation are clear; significant cash outlays, high interest rates, long-term commitment of cash, unpredictable markets, and little, if any, investment protection. Through cost-share assistance, FIP provides incentives to forest landowners to improve forest management and helps to assure that reforestation and timber stand improvement take place on nonindustrial private forest lands.

Reforestation through FIP helps ensure future timber supplies, and also provides a variety of environmental benefits, including soil and water protection, and wildlife habitat. In FY 1992, over 161,767 acres were replanted by the Forestry Incentives Program, and an additional 43,192 acres received timber stand improvement treatments.

NASF supports the funding of FIP at a level of $15.0. million for Fiscal Year 1994.

Conservation Reserve Program (CRP)

The Conservation Reserve Program is responsible for the planting of over 2.4 million acres of trees in this country since 1986. The State Foresters are proud to be a part of this ongoing effort. However, through Fiscal Year 1991, these acres represent only about 6.6 percent of the total acres accepted into CRP contracts. The program has demonstrated its effectiveness in reducing both soil erosion and surplus agricultural commodities, In addition, acres planted to trees will provide long-term timber production and other environmental benefits for many years to come. State Foresters are actively seeking ways of getting more CRP lands planted with trees.

NASF supports continued funding of the Conservation Reserve Program at a level that will achieve the 12.5 percent tree planting goal mandated by Congress.

National Research Initiative

The competitive grants program funded through the National Research Initiative of the U.S. Department of Agriculture has become an increasingly important program for forest scientists. The Initiative awards grants on a competitive basis, aiming to tap into the opportunities presented by modern biological, environmental, and engineering sciences to address critical problems in agriculture and forestry. Research activities funded through this program will improve our understanding of how forestry and agriculture can better manage our resources and protect the environment. These funds provide a stable and long-term base program that is able to address specific forest science issues and concerns.

NASF recommends that the National Research Initiative be funded at $162.0 million for Fiscal Year 1994, with at least twenty percent of these funds directed to forestry research projects.

Agriculture Appropriations
Forestry Related Programs
($ in millions)

	Final FY 93	Admin FY 94	NASF FY 94
Agriculture Conservation (ACP)	194.4	—	195.0
Conservation Reserve (CRP)	1.578 bil*	—	1.8 bil
Forestry Incentives (FIP)	12.446	—	15.0
Renwable Resources Ex. (RREA)	2.765	—	7.0
Mc/Stennis	18.533	—	32.0
Rural Com. Fire Protection (RCFP)	3.5	—	7.0
National Research Initiative	97.5	—	162.0**

* Congress stipulated that there should be no further CRP sign-ups in FY 1993.
**-- NASF recommends that 20% of NRI funds be directed towards forestry-related research projects.

CONSERVATION PROGRAMS

WITNESS

NORMAN A. BERG, SOIL AND WATER CONSERVATION SOCIETY

Mr. DURBIN. Dr. Norman Berg with the Soil & Water Conservation Society.

Thanks for joining us.

Mr. BERG. Thank you, Mr. Chairman, members of the committee.

I am Norm Berg. I am a former chief of the USDA's SCS. Our testimony is in support of the programs of several of the agencies in the department responsible for soil, water and watershed conservation activities including research, extension credit, cost sharing and technical assistance.

Unlike other times, and I have been a witness at your committee's hearings over the past three decades, we do not, at least I do not, know of the administration's budget proposals for fiscal 1994 and perhaps that is just as well in regard to what I have prepared here.

I do have a table showing the funding that the Congress enacted for this fiscal year and this did serve as a guide for our recommendations for fiscal 1994 for the SCS, ASCS, ARS, CSRS, ERS and Farmers Home.

I will highlight only three areas of concern.

First, as Congressman Glenn English testified yesterday, the conservation technical assistance for SCS and ASCS cost share incentives are urgently needed to help those 1.3 million producers with something around 135 million acres of highly erodible crop land to be able to fully implement their conservation compliance plans by December 31, 1994. And this is a voluntary, incentive drive activity that has been moving well but it needs to move these last two years and it is going to be a very stressful time for both the agencies that provide help and the producers that have to meet their requirements.

Second, the Conservation Reserve and the Wetland Reserve programs need to be funded if we are going to meet the not less than 40 million acres nor more than 45 million acres that were authorized in the 1990 Farm Bill. Incidentally, that program runs through 1995, until the first of 1996.

I heard the question yesterday about the cost of the WRP. These first nine state pilot activities that they are in the process of negotiating easements on is running on an average $923 per acre. Now, there is a quite a bit of variance in terms of the cost, related to the cost of New York compared to Mississippi and so forth.

The Conservation Reserve presently after the first 11 sign-ups is running around $52 per acre per year. In regard to the value of that program, the soil saving built into that program on those contracts is roughly 700 million tons per year of soil loss that is reduced. There have been forestry benefits on the acres planted to trees and there are wildlife benefits and there are some improvements in water quality. I will be interested in seeing what the audit shows.

Third, recognizing the constraints that Congress faces perhaps for several years ahead on appropriations, our society has been

very conservative in our recommendations. If there is any promise of more funding for a few other programs, they do need adequate funding and the RC&D activities and the watersheds projects. And although these are funded in SCS's appropriation, they do involve several other agencies as the project plans are implemented at the local level.

Finally, our society sponsored a national forum on the next general of ag resource conservation policy in Kansas City last week. The Secretary of Agriculture was scheduled to attend but could not and sent us a letter. One paragraph said, "The Department of Agriculture is quickly and aggressively addressing a host of policy issues and preparing a new budget that will deliver more efficient services to farmers and all Americans at less cost to the taxpayers."

We would hope that as the administration streamlines our Federal Government the functions of those USDA agencies that help to protect and conserve our nation's natural resources will receive the proper consideration and support, including the number of field offices needed and how the USDA is structured and the funding to carry out their work.

As in the past, we very much appreciate the time to testify.

Mr. DURBIN. Dr. Berg, there was an article that appeared in the Chicago Tribune in the last week or two in reference to the appeals which were taken from decisions on conservation compliance through the Soil Conservation Service. I do not know if you happened to see the article, but are you aware of the statistics that they used, that approximately half of those appeals result in a reversal on earlier decisions?

Mr. BERG. Yes. Yes, Mr. Chairman. Ken Cook representing the Center for Resource Economics, released that report at our national forum in Kansas City last week. That was independent of our activity out there for which we had over 60 co-sponsors. But his release was based on his evaluation work over the past several months based on field data that he had gotten from a variety of sources using the Freedom of Information Act. And that document is about that thick and I would recommend that the committee have a copy.

Mr. DURBIN. What is your impression, having heard that? Do you believe it is accurate?

Mr. BERG. Well, the American Farmland Trust has just finished—and I serve as a senior advisor for that group, too—a survey by phone with 1000 farmers in 32 states about their moving ahead on our compliance plans. And it shows a more favorable story than what we heard from the report that Mr. Cook released last week. And we can provide that data to the committee based on that survey that we just completed.

Mr. DURBIN. If the statistics are accurate, what does it tell us about the program or the enforcement of the program?

Mr. BERG. It tells us that there is a lot of good work going on but there is a lot still to be done. And I think the appeal process is one that the Secretary is concerned about. That is one of the things he has talked about in terms of reorganization, to have some sort of a centralized appeal process that will be able to address the issues

that come from the field on through the state offices and on to the national headquarters.

The SCS delivers the technical backup and then it is up to the ASCS to go ahead and decide how that should be enforced in terms of the compliance with farm programs.

Mr. DURBIN. In a time of limited resources, what is the most cost effective expenditure for conservation?

Mr. BERG. I would say that it is to continue on the course that we have had for over 55 years, and that is offering incentives, providing the necessary data, the technical assistance where needed, to let the land users decide, based on their enterprises and the conditions that they have to face as to what can be done and the time schedule that it should be done on.

Some of the things that are happening on compliance are being a good test of how we can relate commodity and conservation policy. But if we fail on this, we will have many people from outside of agriculture for the most part looking at the only means that they think would succeed and that is a regulatory mode and I think that would be the wrong way to go.

Mr. DURBIN. Thank you.

Mr. Myers.

Mr. MYERS. No questions.

Mr. DURBIN. Thanks for joining us, Dr. Berg. We appreciate your testimony.

[The information follows:]

Statement for U.S.House of Representatives
Subcommittee on Agriculture,Rural Development,Food and Drug Administration,and Related Agencies Appropriations by the Washington Representative,Norman A.Berg,for the Soil and Water Conservation Society(SWCS)on March 24,1993.

Mr.Chairman,members of the Committee,I am Norman A.Berg representing the Soil and Water Conservation Society(SWCS). Our mission,as a multidisciplinary membership organization is to advocate the protection,enhancement,and wise use of soil,water and related renewable natural resources.The SWCS appreciates this opportunity to again make a statement in support of the work of USDA's soil,water,watershed,and related conservation activities.I have prepared our testimony not knowing the Administrations proposal for Fiscal Year'94. Therefore,we have attached a table showing the FY'93 funding provided by Congress in Public Law 102-341-August 14,1992.We also show the amount recommended by SWCS for FY'94 that we believe would be needed for the concerned agencies to carry out their conservation responsibilities this coming year.

My testimony is in support of a broad array of USDA agencies. These include the activities related to research,extension, cost-sharing,credit,and technical assistance,that help landusers solve their soil and water conservation problems.You and I know that each agency prepared a budget for FY'94 that would probably exceed those amounts that will be sent to you by the Administration as reduced spending is forecast.These are difficult times,for all levels of government.The drive to reduce the deficit and to deal with the ever growing national debt has broad public support.Therefore,the recommendations suggested by SWCS are indeed conservative knowing,as we do,of the many complex conservation challenges faced by the people in SCS,ASCS,FmHA,Extension,and Research and their clients.The members of SWCS are especially concerned about the future of the popular Conservation Reserve Program and the Wetland Reserve Program now operating in only nine pilot states.We also know more emphasis is being placed on water quality and sustainable agriculture initiatives assigned to USDA.

This Subcommittee has a long record of supporting the work authorized by the Congress,over many years,to ensure the conservation and protection of the Nation's basic resources. The Food Security Act of 1985(FSA)and the Food,Agriculture, Conservation,and Trade Act of 1990(FACTA)had several very significant conservation actions.The most demanding for the SCS has been the Conservation Compliance provision.The deadline for the 1.3 million landusers,with highly erodible cropland,to fully implement their conservation plans is January 1,1995.Much good work has been done,but the next two years will stress both the farmers and the agencies providing the technical and financial assistance.Auditing of this work is probably going to be accelerated,both within the USDA and by outside interests.This provision of law is taken seriously.

This legislation is being monitored for quality implementation by many. The environmentalists will judge the future of a voluntary-incentive driven approach on the results. If conservation plans are not implemented the pressure will increase to seek a more regulatory approach by some of the organizations that supported all the conservation features of the 1985 and the 1990 Farm Bills. This could be an issue as Congress considers reauthorization of the Clean Water Act and the 1995 Farm Bill.

There are several proposals that could impact the number of USDA field office locations. Also, there are substantial dollar savings projected if USDA reorganizes as rumored. The funding estimates seem to have reductions in staff as a goal. The SWCS is concerned that a hard look is needed so the dollars saved while serving agriculture does not neglect natural resources policy. As USDA streamlining is being analyzed the functions of agencies dedicated to conservation need consideration.

Several of the funding levels recommended for FY'94 are most supportive of a strong infrastructure in USDA. Pollution prevention and environmental protection are a high priority. The Conservation Reserve and the Wetland Reserve Programs should be funded to allow additional bid openings in FY'94. The 1990 Farm Bill had several conservation initiatives that have not been implemented. They need testing prior to enactment of the next Farm Bill. Research funding is important to provide the information needed for critical resource decisions.

SWCS is dedicated to helping promote an ethic that recognizes the interdependence of all people and the environment. To that end we are concerned that the necessary resources will be in place to ensure that USDA agencies can do their work. The protection of the resource base, to be certain that the U.S. has a sustainable agricultural system is important.

The 14 Explanatory Notes may assist the Committee, as we want to justify our budget levels for FY'94. Thanks for your time.

SWCS's Fiscal Year 1994 Federal Funding Recommendations

USDA Agency	FY'93 Enacted	FY'94 Recommended	
	(In millions of dollars)		
Soil Conservation Service			
Conservation Operations	490.2	590.0	(1)
Soil Surveys	72.6	75.0	
Snow Surveys	5.7	6.0	
Plant Materials	8.1	8.5	
Grazing Lands		10.0	(2)
CO Subtotal	576.5	689.5	
River Basins	13.2	11.7	
Watershed Planning	9.5	9.5	(3)
Watershed Operations	228.3	228.3	(4)
RC&D's	32.5	33.0	(5)
Great Plains	25.2	28.0	(6)
Total for SCS	885.4	1,000.0	
Funds transferred to SCS			
Office of Surface Mining	13.5	25.0	
Agricultural Stabilization and Conservation Service			
Agricultural Resources Conservation Program(ARC)			
Conservation Reserve	1,578.5	2,130.0	(7)
Wetland Reserve	0.0	300.0	(8)
Agricultural Conservation Program(ACP)	194.4	200.0	(9)
Forestry Incentives(FIP)	12.4	15.0	
Water Bank(WB)	18.6	20.0	
Colorado Salinity Control Program	13.8	15.0	
Total for ASCS	1,817.7	2,680.0	
Agricultural Research Service			
Soil and Water Conservation Research	81.9	90.0	(10)
Steep II Research	.6	.6	(11)
Cooperative Research Service			
Hatch Act	168.8	175.0	
McIntire-Stennis(Forestry)	18.5	20.0	
Rangeland Research	0.5	1.0	
Sustainable Agriculture Research and Education(SARE)	6.7	20.0	
National Research Initiative	97.5	200.0	(12)
Economic Research Service	58.7	60.0	

Cooperative Extension Service FY'93 Enacted-FY'94 Recommended			
General Formula Funds	262.7	265.0	
Earmarked Programs			
Water Quality	11.4	16.0	
Pesticide Impact Assessments	3.4	4.0	
Pesticide Applicator Training	0.0	10.0	(13)
Integrated Pest Management	8.2	12.0	
1990 Farm Bill	0.0	25.0	(14)
Renewable Resources Extension Act	2.8	10.0	
Farmers Home Administration			
Soil and Water Loans(Direct)	3.5	10.0	
Soil and Water Loans(Guaranteed)	1.4	2.0	
Watershed Protection and Flood Protection Loans	4.0	8.0	
RC&D Loans	.6	1.2	
Farms for the Future		10.0	

SWCS Explanatory Notes

(1)Conservation Technical Assistance(590.0 m)Funds needed for SCS and Conservation Districts to have field people needed not only to meet their responsibilities in the '85 and the'90 Farm Bills,but to continue the important soil and water conservation work throughout the nation.

(2)Grazing Lands Conservation(10.0 m)Supports policy for a new line item for grazing land technical assistance.

(3)Watershed Planning(9.5 m)Amount needed to service current applications and to fund water quality planning in high priority watersheds.

(4)Watershed Operations(228.3 m)Amount needed for contracts.

(5)RC&D's(33.3 m)Funds will support new RC&D areas and rural development in low income project locations.

(6)Great Plains(28.0)This is less than the $ 40 million that was authorized for the Great Plains Conservation Program.

(7)CRP(2,130.0)Amount needed to fund a 39.6 million acre Conservation Reserve in FY'94:
Existing contracts---36.6 million acres @ $50/acre=1,830 m
1994 contracts------- 3.0 million acres @ $50/acre= 150 m
1994 cost-sharing---- 3.0 million acres @ $50/acre= 150 m
Estimate about $65 million in carryover funds

(8)WRP(300 m)Funds needed to support a nation-wide program to add substantial acreage to the present 50,000 to try to reach the goal of a 1 million acre Wetland Reserve.

(9)ACP(200.0 m)This would include up to $50 million earmarked for Water Quality Incentives Projects.

(10)Soil and Water Conservation Research(90.0 m)Increased funds to be used to improve wind and water erosion prediction and control technologies,improve conservation and efficient use of water,and to develop management support systems for rangelands that are environmental.

(11)Steep II(.6 m)This represents a request for a line item in the ARS appropriation for research for problems now lacking suitable technology.

(12)NRI(200.0 m)These funds would be used for more research in the natural resource area,rural revitalization,and plant and animal systems for a sustainable agriculture.

(13)Pesticide Applicator Training(10.0 m)This would be a direct appropriation to Extension instead of pass-through funding from EPA as in prior years.

(14)1990 Farm Bill(25.0 m)Funding needed to support the several new provisions authorized in the 1990 Farm Bill.

ANIMAL WELFARE

WITNESS

CHRISTINE STEVENS, SECRETARY, SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION

Mr. DURBIN. Christine Stevens, Society for Animal Protective Legislation is with us, I believe. Yes, she is.

We have your statement and the attachments. They will be part of our record.

You are joined by someone I hope you will introduce and then we can proceed.

Ms. STEVENS. This is Cathy Liss, the Executive Director of the Animal Welfare Institute. I am the Secretary of the Society for Animal Protective Legislation.

Mr. DURBIN. Nice to meet you. Thank you for coming.

Ms. STEVENS. I have two books which I would like to leave for the use of the subcommittee, Beyond the Laboratory Door, because I am going to talk about the funds for APHIS, for laboratories, and also Our Legal Rights, which tells about the Laboratory Animal Welfare Act and how it came to be enacted. So I would like to start with the very encouraging statements from President Clinton.

"I have always loved and respected animals and abhorred any cruelty to them." And the Animal Welfare Act is just the nation's main piece of legislation to achieve that purpose. And on February 25th of this year, Judge Richey found that the well being of laboratory primates and exercise for laboratory dogs was not being carried out by USDA, the final regulations which rely on performance standards were, according to him, arbitrary and capricious, so we are asking USDA to go back to the drawing board and get some proper standards.

It is interesting to note that The Washington Post just had an editorial this morning which ends, "As in dozens of other agencies, the number of USDA inspectors dwindled during the 1980s. More announced site visits could help catch more of the abusers."

We are asking for 23 million to enforce the Animal Welfare Act plus 750,000 for the Animal Welfare Information Center, which is in the National Agricultural Library, and 500,000 for the Horse Protection Act.

Mr. Chairman, when you realize there is 1474 research facilities with 3495 separate sites, 4400 animal dealers, 1495 exhibits and 442 animal carriers, that all is being taken care of by only 86 people. So you can understand why they have failed in many cases.

Now, we are strong supporters of USDA and its enforcement but a great harm was done to the agency when they reorganized in 1988 and the number of inspectors was cut down, so we hope you will change that. That is really what desperately needs to be done.

There is an Office of Inspector General audit which is attached to my testimony which shows the severe feelings that have been uncovered: 16.2 percent of facilities whose inspection reports were reviewed had not received even one inspection in the past year, more than half the facilities were not in compliance with the act, 80.8 percent of the facilities with violation had not received timely follow up inspection.

I am trying to skim over this because I know you do not have much time.

Mr. DURBIN. I understand.

Ms. STEVENS. The American public demands that serious attention be given to ending fraud and theft by laboratory animal dealers selling dogs and cats. The regulations on pet theft are in the final stage of departmental clearance and that, of course, will add to more work for the inspectors. And I will just give you an example of what was done last year.

Now, D&T Kennels were convicted of criminal conspiracy and attempting to defraud the USDA. The defendants were obtaining random source dogs by answering ads offering animal free to a good home. The pets were then sold to D&T Kennels, a licensed dealer, using fictitious names for the records. And only one dog, Charlie, survived.

I think I can skim over the rest of this.

Animal damage control, we strongly urge more funding for nonlethal methods as contrasted with the lethal methods. They are really more effective in controlling predation but they have not been given the attention that they ought to have.

Mr. DURBIN. Ms. Stevens, you are probably more aware of the Animal Welfare Act's provisions than I am. Is there a requirement in that act for a certain number of inspections per year of each facility?

Ms. STEVENS. It says that it would be—the 1985 amendments required at least one inspection per year of research facilities and that was Senator Melcher's amendment. He was the only veterinarian in Congress and now I do not think you have even got one veterinarian in Congress.

Mr. DURBIN. And it is your contention that is not taking place.

Ms. STEVENS. Well, no. I mean, the Office of the Inspector General just found that it was not happening. We believe that there ought to be three inspections per year. That amount really keeps both dealers and research facilities and zoos up to standard. But if they are just not even inspected once a year, obviously they are not going to behave themselves.

Ms. LISS. Excuse me. If I could just add that that requirement is just for research facilities even to have the one inspection a year and that for all other entities that are inspected, there is no minimum requirement. The inspections are unannounced which is good. However, with most research facilities recognizing they get one inspection a year, you have a pretty good idea of when that is going to occur.

Mr. DURBIN. Now, do we have a track record here that suggests that certain types of facilities are found to be non-compliant more often than others? Is there a certain type?

I mean, a university research facility which might be more sensitive to the Animal Welfare Act as opposed to some other type of facility

Ms. STEVENS. I do not really think you could say that. Every single one can be different. And even within the same university, one department can be excellent and the next department very poor.

Mr. DURBIN. I see.

Ms. STEVENS. It requires actual attention. That is the only way to get it done.

Mr. DURBIN. We have a problem, of course, in many, many different areas, I think of the Food & Drug Administration immediately, where we pass legislation requiring clinical laboratory inspection across the United States, not related to animal research but in general to the clinical laboratory and its component parts, and we have fallen woefully behind. We will be unable to meet our own deadline of, I think, October of 1994 to have these laboratories inspected. So we certainly have established some good standards in many respects but our committee has the responsibility to come up with the resources for them and that turns out to be a bigger challenge than most imagine.

Ms. STEVENS. And it is important that when you are speaking of standards that is what Judge Richey said, these standards are not adequate. And that is because there was such tremendous pressure and lobbying from a certain part of the laboratory animal community, in particular, commercial dealers and commercial—both small animal dealers who make millions of dollars promoting the maximum use of laboratory animals.

Of course, our organizations want the minimum use. We want to see that when laboratory animals are used they are really necessary and not wastefully and cruelly used.

Mr. DURBIN. Well, thank you very much for your testimony.

Mr. Myers?

Mr. MYERS. No questions.

Mr. DURBIN. No questions?

Thank you both for coming. We appreciate that.

[The information follows:]

SOCIETY FOR ANIMAL PROTECTIVE LEGISLATION
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Statement in Support of
$23 Million for Enforcement of the Animal Welfare Act,
$750 Thousand for the Animal Welfare Information Center,
$500 Thousand for Enforcement of the Horse Protection Act,
and an Increased Allocation of ADC Funds for Non-lethal* Research
for FY 1994

Before the House Appropriations
Subcommittee on Agriculture, Rural Development,
Food and Drug Administration and Related Agencies

by Christine Stevens, Secretary

March 24, 1993

We believe that the reorganization of the Animal and Plant Health Inspection Service (APHIS) in 1988 had a severely adverse effect on enforcement of the Animal Welfare Act. Combined with insufficient funding, the directions to the staff of Regulatory Enforcement and Animal Care (REAC) from the former Administrator and former Deputy Administrator of APHIS downplayed serious inspections and enforcement in favor of vague goals described as "educational". Fortunately, committed inspectors and other staff continued to carry out their work despite lack of encouragement.

President Clinton has stated: "I have always loved and respected animals and abhorred any cruelty toward them. Please be assured that a Clinton Administration would be extremely sensitive to these issues and concerns." The new Administration must be given the opportunity to honor the standards of the federal Animal Welfare Act (AWA) and revivify the nation's only comprehensive federal law on the welfare of animals. To do that a minimum of twenty-three million dollars must be appropriated.

RULING ON IMPROVED STANDARDS FOR LABORATORY ANIMALS AMENDMENTS

On February 25, 1993, more than seven years after Congress enacted the Improved Standards for Laboratory Animals (ISLA) Amendments to the AWA, US District Court Judge Richey issued a ruling upholding the Congressional Mandate for exercise for laboratory dogs and an environment adequate to promote psychological well-being of laboratory primates. Judge Richey found the final regulations promulgated by USDA, which rely on "performance standards", arbitrary and capricious.

In issuing his ruling the judge stated that the regulations "...do not provide the minimum requirements mandated in the Act. 'A dog is man's best friend' is an old adage which the Defendants

[USDA, Health and Human Services, and the Office of Management and Budget] have either forgotten or decided to ignore. Hopefully the new Secretary will ensure that the bureaucracy he inherits and the special interest groups with which he must contend will be forced to remember this sentiment and comply with the law."

Referring to special interest groups' efforts to delay implementation of requirements under ISLA, the judge stated, "...former Judge J. Skelly Wright of our Court of Appeals once said, in essence, that the regulators in Washington are regulated by the regulated. This may well be the case here. If this is so here, then something needs to be done to change the process."

The judge's order states that USDA must promulgate new regulations, "without unnecessary delay", under ISLA. The judge further ordered that the Plaintiffs [Animal Legal Defense Fund, Society for Animal Protective Legislation, Drs. Roger Fouts, Bernard Migler, and William Strauss] "may make further application to this Court in the event that the Defendants do not act with all deliberate speed...."

The Plaintiffs look forward to the prompt promulgation of sound regulations.

ANIMAL WELFARE ACT ENFORCEMENT RESPONSIBILITIES OF USDA

The U.S. Department of Agriculture has a tremendous responsibility in assuring that the minimum standards of the Animal Welfare Act are met at research facilities, dealers' premises, animal exhibits, and during transportation by intermediate handlers and carriers. The number of sites in need of inspection are greater than ever before because the number of facilities regulated by USDA has continued to increase. In 1992 there were 1,474 research facilities (with 3,495 separate sites), 4,400 animal dealers, 1,495 exhibitors and 442 animal carriers and handlers. Currently, the field staff consists of 49 Veterinary Medical Officers (VMO's) and 37 Animal Care Inspectors (ACI's) for a total of only 86.

Additional monies are desperately needed for more field inspectors so that every site can be visited at least three times a year. This is the minimum number of inspections necessary to assure steadfast, nationwide compliance with the law. Strict enforcement including prompt legal action must be pursued if the minimum standards are not met.

In our testimony before this distinguished subcommittee last year we requested an appropriation of $23,048,399 to enable the Agency to carry out its responsibilities. Attached is a copy of the statement submitted last year by the Society for Animal Protective Legislation on behalf of more than 200 animal protective organizations who want to see the Animal Welfare Act adequately funded and properly administered.

OFFICE OF THE INSPECTOR GENERAL AUDIT

The report from the Office of the Inspector General (OIG) (March 1992) shows clearly the damage done under the Department's previous administration. The recent book, Stolen for Profit, by Judith Reitman details the regrettable performance by the former APHIS Administrator and his Deputy from an outside perspective.

The Animal Welfare Act must be enforced. Its requirements for minimum standards can no longer be allowed to be routinely violated as the Inspector General's Audit clearly shows them to have been. For the use of this distinguished Subcommittee, I submit a copy of the Inspector General's findings, some of which are listed below.

"Our audit concluded that APHIS cannot ensure the humane care and treatment of animals at all dealer facilities as required by the act. APHIS did not inspect dealer facilities with a reliable frequency, and it did not enforce timely correction of violations found during inspections."

16.2 % of facilities whose inspection reports were reviewed had not received even one inspection in the past year! More than half of the facilities were not in compliance with the Act. 80.8% of the facilities with violations had not received timely follow-up inspections.

"The infrequency of inspections occurred because APHIS expects a limited number of qualified inspectors to perform a large number of inspections."

There were seven dealers identified who had violations which were not corrected and were cited during 3 or more inspections.

"Of the 22 licensed breeding facilities we visited, 17 had not properly identified the animals. In addition, 14 of these facilities did not maintain adequate inventory records."

"...85.6% of inspections performed in Missouri required a follow-up inspection because of identified violations."

We agree with the Inspector General's audit that facilities which do not meet the minimum standards of the Animal Welfare Act should not be in business. The audit stated that of 284 licensed facilities reviewed, 49 licenses were renewed despite the fact that the facilities were not in compliance with the Act's minimum standards. Licenses should not be renewed for facilities that have repeatedly failed to meet the minimum standards.

As stated in the audit, distribution of memoranda as was done when Veterinary Services was administering the Animal Welfare Act (prior to the reorganization) should be reinstated. It is essential that the entire field staff receive the same instruction, the information is available for future reference, and the position of the Department is clear to all.

The Audit itself has not been supplied to the field staff. Instead, bland statements, that the inspectors were told to use as responses when they receive inquiries about the Inspector General's highly critical report, were handed out. This question and answer sheet is attached.

REGULATIONS ON PET THEFT ACT AND EXOTIC ANIMAL AUCTIONS

Lifting of the regulatory freeze will allow regulations on pet theft and exotic animal auctions, which have been found to be highly abusive, to be published this year.

The American public demands that serious attention be given to ending fraud and theft by laboratory animal dealers selling dogs and cats. The regulations on pet theft are in the final stage of departmental clearance.

This February, following a year-long investigation, the operators of D & T Kennels were convicted of criminal conspiracy and attempting to defraud the USDA. The defendants were obtaining random source dogs by answering ads offering animals "free to good home". The pets were then "sold" to D & T Kennels, a licensed dealer, using fictitious names in the records. The animals were then sold by D & T Kennels for use in medical research. Only one dog, Charlie, survived the experimental research and was rescued.

The Society for Animal Protective Legislation is a strong supporter of the Animal Welfare Act and its enforcement by USDA. We hope that sufficient funding can be forthcoming to assure well-being of animals under the law.

ANIMAL WELFARE INFORMATION CENTER

An appropriation of $750,000 should be designated as a line item for the Animal Welfare Information Center (AWIC) at the National Agricultural Library. The Center was established in accordance with the mandate in the Improved Standards for Laboratory Animals Amendments calling for an information service to assist with laboratory animal employee training, to prevent unintended duplication of animal experiments, to help reduce or replace use of animals where possible, and to minimize animal pain and distress.

The AWIC has been a much needed resource to the research community (researchers, Institutional Animal Care and Use Committees, veterinarians and librarians) and can be to the staff of REAC. In the past AWIC has conducted workshops, provided grants, and exhibited at conferences. Unfortunately, an increasing percentage of monies designated for AWIC have been used to cover other programs within the National Agricultural Library. Committee report language should designate the appropriation solely for the AWIC and not for other purposes.

THE HORSE PROTECTION ACT

Limited funding has permitted inspection of only about 1/10 of the horse shows conducted in a given year. USDA is under great pressure from the Tennessee Walking Horse industry. $500,000 is needed to permit inspection of more horse shows.

THE ANIMAL DAMAGE CONTROL PROGRAM

Research efforts on non-lethal* projects must intensify to meet the needs of the Animal Damage Control (ADC) field operations. An increased allocation of funding should go to non-lethal* projects conducted by the Denver Wildlife Research Center (DWRC); we propose an increase from 55% to 70%. Funding for animal damage control field operations should be cut back until it can be demonstrated that new technologies are being employed and the proper treatment of animals is a priority.

ADC Research Operations

Investigations should continue and expand on a number of worthwhile projects including chemical bird and mammal repellents, immunocontraception and "scare" devices.

We support appropriation of funds for the relocation of DWRC to Fort Collins with committee report language identifying the objective to accelerate research, availability and use of a variety of non-lethal* control methods.

ADC Field Operations

While the DWRC is making some progress in working on innovative techniques for less cruel means for controlling problem wildlife situations, the field program appears to be stagnating. Methods used, such as steel jaw traps, denning, poison baits and aerial gunning, are inhumane, indiscriminate and provide a large "body count" but not a long term solution to the predation.

Lack of concern about pain and suffering inflicted on depredating animals is prevalent. ADC continues to use the barbaric steel jaw trap, banned in more than 60 countries, and lobbies against prohibitions on steel traps before state and local legislatures.

Federal ADC trappers have long operated with an exemption from state game laws on checking for animals caught in traps. Many ADC trappers are only required to check traps twice a week! Any restraining trap will cause immeasurable suffering when holding an animal (which could be a non-target victim) for this length of time. In New Mexico recently, the State Land Commissioner banned federal ADC trappers from trapping on state lands because of their refusal to comply with the state trapping law regarding checking traps.

The archaic field program was best described by a state ADC officer who said, "We're feeding a dinosaur, and we'll go the way of the dinosaur."

*Non-lethal refers to methods such as repellents, chemosterilants and aversive techniques. We propose a research budget increase from 55% to 70% for non-lethal work.

ANIMAL WELFARE

WITNESS

MARTHA COLE GLENN, DIRECTOR, FEDERAL LEGISLATIVE AFFAIRS, THE HUMANE SOCIETY OF THE UNITED STATES

Mr. DURBIN. Martha Cole Glenn, with the Humane Society. Ms. Glenn, we are going to try to take your testimony if we have the time and I think we might.

Ms. GLENN. Well, I am a southerner but I am going to be quick.

Mr. DURBIN. Okay. Fine. Thank you.

We have your testimony and it will be made part of the record. If you would like to summarize at this point?

Ms. GLENN. Thank you. I am Martha Cole Glenn, Director of Legislative Affairs for the Humane Society of the United States. The HSUS is the nation's largest animal protection organization with 1.6 million members and constituents.

I am pleased to have the opportunity to testify today.

We appreciate the subcommittee's past support of research and use of non-lethal animal damage control techniques. However, we are still concerned about the overwhelming reliance on lethal control methods and we recommend that additional funds be directed toward ADC research on non-lethal techniques.

The HSUS supports SAPL's testimony on the Animal Welfare Act and we recommend a appropriation of $23 million for enforcement of the AWA and strong report language directing APHIS to improve this enforcement.

The record of APHIS in this area is appalling as confirmed by a March 1992 Inspector General audit report which concluded that APHIS cannot ensure the humane treatment of animals, does not inspect dealer facilities with reliable frequency and revealed that 87 percent of facilities visited were in violation of the Animal Welfare Act.

We support funding for the Packers and Stockyards Administration at the fiscal year 1993 level because we are especially concerned about the care and handling of animals of stockyards. We anticipate the current P&S study on this issue will confirm what the HSUS, the American Veterinary Medical Association, the National Pork Producers Council and numerous cattlemen's associations have stated: that downed animals should never be sent through intermediate markets.

Increased demand for organic food, confusion over what organic means and variance in standards from state to state led to the landmark Organic Foods Production Act of 1990. But insufficient funding has delayed implementation. We request an appropriation of 150,000 for the National Organic Standards Board and 780,000 for program implementation. We want to emphasize, Mr. Chairman, that this 780,000 request will not be an annual request, as the program is designed to be funded by user fees once it is underway.

Finally, Mr. Chairman, as you said yesterday at the Public Voice Food Policy Conference, research in agriculture is essential. The HSUS calls on Congress to fund the worthy sustainable agriculture programs we have cited in the longer testimony and we also ask that you ensure that funds are not taken away from the Animal

Welfare Information Center of the National Agricultural Library to fund other library programs.

Thank you.

Mr. DURBIN. Thank you very much.

I am puzzled by the inclusion in your testimony this reference to organic food. What does that have to do with the Humane Society?

Ms. GLENN. The Humane Society has a program of sustainable agriculture. We work very closely with farmers who support sustainable agriculture practices because one of the things we have found is that those farmers who deal in sustainable agriculture tend to be very, very concerned about the welfare of the animals.

Mr. DURBIN. Okay. Thank you.

Mr. Myers.

Mr. MYERS. No questions.

Mr. DURBIN. Thank you for joining us. We will keep your testimony in mind as we move into markup and as Mr. Myers and I move off to vote. We will be back in just a few minutes. It will probably be a few minutes after five. We will try to get back as quickly as we can.

[Recess.]

[The information follows:]

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HS

STATEMENT OF MARTHA COLE GLENN

DIRECTOR, FEDERAL LEGISLATIVE AFFAIRS

THE HUMANE SOCIETY OF THE UNITED STATES

BEFORE THE

HOUSE COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,

FOOD AND DRUG ADMINISTRATION,

AND

RELATED AGENCIES

FY'94 APPROPRIATIONS:

ANIMAL DAMAGE CONTROL PROGRAM
ANIMAL WELFARE ACT
PACKERS AND STOCKYARD ADMINISTRATION
NATIONAL ORGANIC STANDARDS BOARD
SUSTAINABLE AGRICULTURE PROGRAMS
ANIMAL WELFARE INFORMATION CENTER

MARCH 24, 1993

The Humane Society of the United States
2100 L Street, NW, Washington, DC 20037
(202) 452-1100 FAX (202) 778-6132

Mr. Chairman, members of the subcommittee, I am Martha Cole Glenn, Director of Federal Legislative Affairs for The Humane Society of the United States (HSUS). The HSUS is the nation's largest animal protection organization, with 1.6 million members and constituents. I am pleased to have the opportunity to testify today regarding FY'94 funding of programs of interest to The HSUS which are under the jurisdiction of your subcommittee.

ANIMAL DAMAGE CONTROL PROGRAM (ADC)

We appreciate the subcommittee's past support of research and use of non-lethal animal damage control techniques. This research and the incorporation of proven non-lethal techniques into the operational activities of the Animal Damage Control (ADC) Program is helping to provide ADC agents and property owners, particularly livestock producers, with alternatives to exclusively lethal means of predation control.

However, we are concerned by the continued overwhelming reliance in the ADC Program on lethal methods of control, such as the killing of Western predators (primarily coyotes) by aerial hunting, trapping, denning and poisoning. Despite declarations at the Washington level that the ADC Program utilizes lethal control methods only as a last resort and targets whenever possible the individual animal causing damage, the number of coyotes killed each year continues to increase. This approach is expensive, ineffective and likely to be counterproductive.

The HSUS recommends that the subcommittee instruct USDA to devote a substantial percentage of FY'94 Western region operational funds for the ADC Program to use of non-lethal wildlife damage control techniques such as livestock guarding dogs and siren/strobe devices and practices such as carcass removal, night penning and shed lambing. **We recommend that the subcommittee direct APHIS to allocate a minimum of forty percent of Western region operational funding to the implementation and use of non-lethal predation reduction techniques.**

ADC researchers have worked on a number of techniques which promise to reduce wildlife-caused losses without killing wildlife, but are threatened annually by budgetary constraints. Therefore, **we ask that the subcommittee direct that a minimum of 70 percent of funds allocated to ADC research be devoted to the identification and development of non-lethal, non-injurious, damage control techniques. In particular, The HSUS requests that $100,000 in FY'94 non-lethal research funds go to Arizona State University's Center for Environmental Studies for continued support of vital research on the use of conditioned taste aversion as a means of reducing coyote predation on livestock.**

ANIMAL WELFARE ACT (AWA)

The HSUS endorses the testimony of the Society for Animal Protective Legislation (SAPL) which requests the following: **a FY'94 appropriation of $23 million for the enforcement of the Animal Welfare Act (AWA), the chief law for protection of animals in the United States; $750,000 for enforcement the Animal Welfare Information Center and $500,000 for enforcement of the Horse Protection Act.** We join with SAPL in pointing out that insufficient funding combined with a regulatory approach which has downplayed serious, thorough inspections and enforcement of

violations of the law in favor of vague "educational" goals have had an extremely serious, adverse effect on enforcement of the nation's primary animal protection law. These funds are needed to ensure that there are enough inspectors and adequate inspections of facilities covered by the Animal Welfare Act.

As reported in our FY'93 testimony before this subcommittee, since 1986, the number of inspections has decreased from an average of 2.15 per site to a low of 1.22 in 1989. This trend has been of great concern to The HSUS. In 1990 APHIS reported an average of 1.40 inspections per site, and while this increase is encouraging, The HSUS believes that 1.40 inspections per site is still woefully inadequate. With 1,474 research facilities (3,495 separate sites), 4,400 animal dealers, 1,495 exhibitors and 442 animal carriers and handlers, the APHIS field staff has only 49 veterinary medical officers and 37 animal care inspectors, for a total of 86 -- obviously far to few to adequately enforce the law.

This failure to enforce the law was graphically confirmed in the summer of 1992, when a Freedom of Information Act (FOIA) request submitted by The HSUS uncovered a March, 1992, **USDA Inspector General's Audit Report** (No. 33002-001-Ch) **which concluded "that APHIS cannot ensure the humane care and treatment of animals at all dealer facilities as required by the act. APHIS did not inspect dealer facilities with reliable frequency, and it did not enforce timely correction of violations found during inspections."** A summary of the conditions found (including the fact that 87% of the facilities visited were in violation of the Animal Welfare Act) is attached. This failure of the USDA to conduct an adequate number of inspections, is nowhere more evident than at commercial dog breeding facilities, the worst of which are commonly known as "puppy mills." Despite national attention brought by The HSUS and the national media through such programs as ABC"s "20/20", the USDA continues to be outrageously lax in enforcement of the AWA at these facilities, which on the average are inspected little more than one time a year. In fact, at one point, a USDA inspector was operating her own puppy mill.

As shown during the July 8, 1992, hearing on the treatment of exhibition animals before the House Agriculture Department Operations Subcommittee (Rose, D-NC), the inadequate regulations, standards, and enforcement of the AWA have also failed to ensure the well being of animals exhibited in zoos, aquaria, circuses, and animal acts. The HSUS finds these inadequacies especially disturbing when considering the inability of APHIS to ensure AWA compliance for animals which seem to face particular hardships in captivity, such as marine mammals, primates, elephants, big cats and bears. **In fact, as confirmed by the 1992 USDA Inspector General's audit report, licenses continue to be renewed despite repeated AWA violations, and violations are not routinely or stringently penalized. These failures result in animal neglect, abuse, injury, illness and premature death.**

Given this continued failure of USDA to enforce the law, **The HSUS recommends, as one method to correct these very serious animal welfare problems, that the joint responsibility for ensuring**

compliance for the care and maintenance of marine mammals in captivity currently shared by APHIS and the National Marine Fisheries Service (NMFS/Department of Commerce), be fully and solely transferred to NMFS, which has authority over the initial "take" of marine mammals and facility standards. This action would not only streamline the current cumbersome and confusing permitting and care compliance process by refining all related responsibilities under one agency -- NMFS -- but also free up funds to improve APHIS efforts on behalf of other exhibition animals.

With final reference to the need for stricter enforcement of the AWA by USDA, The HSUS applauds the February 25, 1993, ruling issued by U.S. District Court Judge Richey overthrowing recent USDA regulations on exercise for laboratory dogs and the well-being of laboratory primates and ordering the USDA to promulgate new regulations pursuant to the congressionally-mandated Improved Standards for Laboratory Animals. We hope that Congress will join with us in asking for prompt promulgation of sound regulations.

PACKERS AND STOCKYARDS ADMINISTRATION

The HSUS also requests that funding for the Packers and Stockyards Administration continue at the level of FY'93 funding. Although funding for The P & S Administration is a one-line budget item, we would like to emphasize the importance of The P & S Administration Livestock Marketing Division's responsibility for monitoring the care and handling of animals at stockyards.

One example of the importance of its role in monitoring the handling of animals is demonstrated by the problem of the abusive treatment of many downed animals at livestock markets, a problem that has received a great deal of public attention and concern. The P & S Administration has been investigating the handling of these and other animals at livestock markets and is expected to complete their investigation at the end of this year. **We expect this study will confirm what The HSUS, The American Veterinary Medical Association, The National Pork Producers Council, numerous state Cattlemen's Associations, and many others have stated -- downed animals should never be sent through intermediate markets.**

THE NATIONAL ORGANIC STANDARDS BOARD (NOSB)

In response to the increased demand for organic food, confusion over exactly what "organic" means and variance in standards from state to state, The U.S. Organic Foods Production Act of 1990 established the first national standards for organic food production. These standards will help develop the market and assure consumers of consistent standards for organic foods. The National Organic Standards Board (NOSB) is the public advisory board which is mandated by the Act to develop guidelines for organic production.

The HSUS requests that Congress approve a FY'94 appropriation of $780,000, for implementation of the Organic Foods Production Act and $150,000 for the operation of the National Organic Standards Board (NOSB). The $780,000 figure is one which has been calculated by the USDA

Agricultural Marketing Service (AMS) as the amount necessary for it to fulfill its obligations under the Act.

Unfortunately, in FY '93 the $780,000 figure approved by the Senate was knocked out in Conference. This lack of sufficient funding has now delayed implementation of the program for at least one year beyond the legislative deadline and threatens the survival of this program. We emphasize that these funding figures will not be requested for administration of the program on an annual basis once it is up and running, as the program is designed to be funded by user fees.

The National Organic Standards Board is unique in that it performs a broad range of statutory tasks in addition to the standard duties of other agricultural advisory committees. That the NOSB has many more responsibilities and requires a more extensive time commitment than other agricultural advisory committees (including the following key committees: livestock, crops standards, accreditation, materials, processing, international) underscores the critical need for the full funding of $150,000, a level similar to the FY '92 level of $120,000 rather than the inadequate funding level of $15,000 in FY '93.

SUSTAINABLE AGRICULTURE RESEARCH AND EXTENSION (SARE)

The HSUS urges that the $40 million authorized by Congress for The Sustainable Agriculture Research and Education program (SARE) be fully funded. SARE is the **only federal research and education program that focuses solely on sustainable agriculture systems and practices.** It is also unique in its blend of extensive farmer participation, integration of research and extension, preference for whole farm systems research projects, and partnership philosophy joining public agencies and private research and education organizations.

Congress has authorized $40 million for this program, but it is currently funded at a level of only $6.7 million, 0.4% of the USDA budget for research and education. We call on your support for full funding of the SARE program, which would increase sustainable agriculture research to 2.3% of the USDA research and education budget.

SUSTAINABLE AGRICULTURE TECHNOLOGY DEVELOPMENT AND TRANSFER PROGRAM

The Sustainable Agriculture Technology Development and Transfer Program (SATDTP) was created by Congress in the 1990 Farm Bill. This program consists of two parts: a nationwide sustainable agriculture training program for extension agents and other agricultural professionals, and a nationally-coordinated, state and regionally-based extension outreach effort. This program would utilize the existing regional administrative apparatus of the SARE program.

The HSUS urges the Congress to fund this program in FY'94 at the amount authorized in the 1990 Farm Bill -- $20 million. Farmers are in great need of new and reliable information on sustainable practices. At the same time, research efforts in sustainable agricultural would be

enhanced with a better flow of information from the farmer (who is utilizing the research) back to those developing the technology. Extension is the perfect vehicle for realizing these joint goals, and funding for this program is critical if we are to make the transition to a more sustainable system of farming.

This program would not only serve as the outlet for sustainable agriculture information, but could also provide the means for Extension Service input and response to programs established by the Clean Water Act and other environmental laws, and provide a vehicle for integration of the R&D results of the USDA s water quality and integrated pest management programs.

Animal Welfare Information Center (AWIC)

The HSUS requests the subcommittee ensure that the Animal Welfare Information Center (AWIC) at the National Agricultural Library (NAL) receive an allocation of $750,000 for FY'94. Recently, funds have been removed from the AWIC allocation to meet other NAL needs. The Center was established as an information center to assist with laboratory animal employee training, to prevent unintended duplication of animal experiments, to help reduce or replace use of animals where possible, and to minimize animal pain and distress. It is a unique source of information for a wide range of people, including veterinarians, school children, biomedical researchers, exhibitors, educators, Capitol Hill staffers and others who need to information about compliance with the AWA.

WIC PROGRAM, AND FDA REGULATIONS

WITNESS

ADRIANNE BENDICH, PH.D. SENIOR CLINICAL RESEARCH COORDINATOR, HOFFMAN-LA ROCHE INC.

Mr. DURBIN. Forgive the interruption but three votes later we return to Dr. Adrienne Bendich, Hoffmann-La Roche Vitamins and Fine Chemicals Division.

Thank you for joining us today.

Ms. BENDICH. Thank you very much. I am Adrienne Bendich and make these comments on behalf of Hoffmann-La Roche.

Last year, the Public Health Service recommended that all women of child bearing potential consume daily the current USRDA level of folic acid, a B-vitamin, for the purpose of preventing neural tube birth defects such as spin bifida. The recommendation was based on research which convincingly showed that taking a folic acid containing multi-vitamin supplement before and during the early months of pregnancy reduced the incidence of neural tube defects to zero and halved the total number of birth defects.

The WIC programs provides an ideal avenue for implementing the U.S. Public Health Service recommendation since one out of every three births in the U.S. is to a WIC mother.

Unfortunately, at the very time of such exciting research, FDA still has not approved the health claim for folic acid and reduction in birth defects although this was one of the specific health claims Congress asked the agency to review under the Nutrition Labelling and Education Act.

The FDA has also called for significant reductions in the USRDA levels of many vitamins and minerals that have been linked to prevention of cancer, cardiovascular disease, osteoporosis and cataracts. Thus, the FDA's intended regulations may jeopardize the potential for lowering health care costs through disease prevention.

As one example, the lifetime medical costs are about $300,000 for a spina bifida affected child and about 2000 are born each year. Of course, no price tag can be placed upon the emotional trauma to the loved ones and to the child born with a birth defect that might have been avoided with a safe, simple and inexpensive intervention.

During this time when Congress is searching for ways to reduce health care costs, this preventive approach could result in tremendous savings in the MEDICAID program which serves many participants. We strongly suggest that the director of the WIC program review the potential impact of implementing the Public Health Service recommendation and also examine the effects of FDA's intended reductions in the USRDAs on women and children at nutritional risk who participate in the WIC program.

Now, if you have another moment, we are also aware that this subcommittee has jurisdiction over the USAID program. We suggest that the life threatening problem of iron deficiency anemia can be reduced by adding sufficient Vitamin C to the cereal grain products provided to underdeveloped countries. It has been clearly demonstrated that 25 to 50 milligrams of Vitamin C consumed during a meal significantly enhances the absorption of iron from

grains and therefore would help to increase iron status as well as Vitamin C status.

Thank you so much.

Mr. DURBIN. Thank you. And let me ask you this, let me make sure I understand this. You are saying at this point that the WIC program is not recommending multi-vitamins containing folic acid?

Ms. BENDICH. The WIC program deals usually with women who come in and are well into their pregnancy. In order for this modality to work, the Public Health Service has recognized that you really have to reach all women of child bearing potential because birth defects, serious birth defects, occur within the first few weeks of pregnancy, before most women even know they are pregnant.

So what we are suggesting in the larger comments that we have provided to you is that there is an opportunity for the WIC program because most women who enter the WIC program and are already pregnant stay with the program or their child stays with the program during a period of time when they are going to have a second pregnancy. And that is the window of opportunity for the WIC program. They have a nutrition education program, they could really reach a critical group of women who could be helped.

Mr. DURBIN. Do you think even though there is certainly value in the first pregnancy, in the following pregnancy there is a chance to reach them early in the pregnancy?

Ms. BENDICH. Well, as WIC is set up now, the woman has to come in and know she is pregnant and usually they are enrolling late in their pregnancies.

Mr. DURBIN. We discussed that earlier with the Food and Nutrition Service.

Ms. BENDICH. Yes.

Mr. DURBIN. That is one of the problems we run into. I have heard about this and one of my staff people had a child with spina bifida and they were very conscious of its research and it appears to have a lot of promise to it in terms of reducing or eliminating this problem and that makes sense.

Now, I really think you make a valuable suggestion. I am pleased to read this suggestion of making multi-vitamin supplements eligible under the food stamp program.

Ms. BENDICH. Yes.

Mr. DURBIN. I am surprised to hear they are not.

Ms. BENDICH. We would like that very much to be changed.

Mr. DURBIN. I would, too. I want to find out why they are not. If we are not calling this a drug, because the Food & Drug Administration does not, we do not call it a food, I am wondering why it still cannot be used. I mean, we do allow, as you say, potato chips and a few other things to be purchased with this money.

Ms. BENDICH. If it is used legally.

Mr. DURBIN. Yes, that is true.

Thank you for your testimony. We appreciate your coming.

Ms. BENDICH. Thank you so much.

[The information follows:]

Agricultural, Rural Development, Food and Drug Administration, and Related Agencies Subcommittee on Appropriations Meeting
March 24, 1993
Room 2362, Rayburn Building

Written Comments Concerning the WIC Program and FDA Regulations

Adrianne Bendich, Ph.D.
Hoffmann-LaRoche Inc.
Nutley, NJ 07110

These comments are submitted on behalf of Hoffmann-LaRoche Inc., a corporation of the state of New Jersey.

We are very pleased that the Administration has highlighted the importance of the WIC program and plans to increase coverage to all eligible persons. The purpose of our comments is to support an increase the effectiveness of the WIC program by lowering the number of adverse pregnancy outcomes, especially birth defects, which are the number one cause of infant mortality in the US. The US Public Heath Service (PHS) has recommended that all women of child bearing potential consume 400 micrograms of folic acid daily (100% of the present US RDA) for the prevention of neural tube birth defects. This recommendation is based on the convincing clinical studies which show that folic acid-containing multivitamins taken before conception and during the early months of pregnancy reduced the risk of crippling, debilitating, and at times, life-threatening birth defects by up to 70%.

Because most serious birth defects develop during the first few weeks of pregnancy, the preventive effect of folic acid-containing multivitamins is only seen when women take them before conception and during the early months of pregnancy. Unfortunately, the majority of women who enter the WIC program are already past the point in their pregnancies when serious birth defects can be prevented.

Background Information:

Data from a placebo-control, double blind study, published in the New England Journal of Medicine in December, 1992, showed that middle-income women (with presumably better diets than poor women) who took a folic acid-containing multivitamin prenatal supplement daily for at least one month prior to conception and throughout pregnancy had no babies with neural tube birth defects (NTD) and half the number of all types of birth defects compared to the placebo group which had six NTD-affected pregnancies. This month, in the Journal of the American Medical Association, a confirmatory case-control study was published which showed that women who took a daily multivitamin supplement containing the current US RDA of folic acid for adults (400 micrograms) had a 60% reduced risk of having a NTD-affected pregnancy.

These studies add convincing, further proof to a large body of earlier work pointing to the importance of folic acid in the prevention of NTD. Thus, there is compelling evidence for the advocacy of the use of folic acid-containing multivitamins for women of childbearing potential. The potential health care savings would be very large. The total lifetime costs of care of a child with spina bifida, estimated by the Spina Bifida Association at $300,000, would be substantially reduced because of an expected decrease of at least 50% each year in the annual rate of 2000 affected births. This, of course, does not begin to measure the human suffering and lifetime emotional trauma that accompanies these tragic birth defects, especially when they may have been avoided with a safe, simple and inexpensive intervention. The emotional as well as monetary costs involved with therapeutic abortions because of neural tube defects would also be significantly reduced.

It is of interest to note that multivitamin supplements cannot be purchased with Food Stamps, even though these can be used to purchase soda, potatoe chips and other foods containing very low levels of essential micronutrients.

Proposal:

Initiation of a pilot program in which postpartum WIC participants are provided with folic acid-containing multivitamin supplements is suggested. Subsequent birth outcomes and maternal health would be monitored to determine the effects of the supplementation program. This proposal is based on the fact that a high proportion of women who enter WIC during their first pregnancy become pregnant again before the first child is five years old. Thus, the pilot program would provide the opportunity for the active participation of WIC in the implementation of the PHS recommendation. This is especially critical because the FDA has not moved forward with the health claim for folic acid and prevention of birth defects. Thus, WIC could provide poor women with access to folic acid-containing supplements, as recommended in the PHS statement, since their opportunity to obtain this important preventive health measure would otherwise be limited.

A second mechanism for increasing the intake of critical micronutrients for WIC participants would be to designate folic acid and other micronutrients as priority nutrients. For example, WIC coupons could be issued for the purchase of breakfast cereals which contain 100% of the US RDA of folic acid and the other essential vitamins and minerals, as well as the already designated priority nutrient, iron. We are well aware that not every WIC participant may choose to consume a daily multivitamin supplement, and therefore the option of consuming a fully fortified breakfast cereal either in place of or in addition to the supplement may increase compliance.

The Potency of Prenatal Supplements:

Currently, most WIC participants are given a prenatal multivitamin supplement during the remainder of their pregnancy and during lactation. The FDA, in establishing regulations under the Nutrition Labeling and Education Act (NLEA), has signalled its intention to make significant reductions in the daily intake standards of the micronutrients for pregnant and lactating women. For example, there would be a decrease of 73% in vitamin B12; 67% in vitamin A; 50% (from 800 ug to 400 ug) in folic acid and vitamin E; and even an 8% reduction in calcium

for pregnant women. There would also be a reduction of 68% in vitamin B12; 50% in folic acid; 46% in vitamin A; 42% in vitamin E and 17% in iron and vitamin B6 as well as an 8% reduction in calcium for lactating women.

Should the FDA proceed as intended, the result will be that, while the prenatal supplements pregnant women take will have significantly lower nutrient values, they will still be labelled as containing 100% of recommended levels. It is doubtful that there would be an accompanying reduction in the costs of prenatal supplements, since the cost of the bulk vitamins and minerals is only a small fraction of the cost of the finished supplements as packaged.

As stated above, the definitive intervention study which resulted in the PHS recommendation used a folic acid-containing prenatal supplement which contained the current US RDA levels of vitamins and minerals for pregnant women. It is entirely possible that changes in FDA standards regarding micronutrients could result in the loss of the birth defect-preventing capacity, since prenatal supplements would have significantly less of the micronutrients associated with the prevention of neural tube and other serious birth defects.

Other Consequences for WIC Participants:

It must be especially clear to the Subcommittee that the women in the WIC program are at increased risk for nutrient deficiencies. Many are teens, smoke cigarettes, drink alcohol, use drugs- both legal and illegal, are dieting or eating less than optimal diets. Lowered FDA standards could compromise the effectiveness of the WIC program in lessening the number of low birth weight (LBW) infants born to WIC mothers. Low birth weight is the second leading cause of infant mortality in the US. While LBW is caused by various factors, one important factor is iron deficiency anemia which increases the risk of LBW three fold. Therefore, it is critical that iron status be maintained at adequate levels. It is well accepted scientifically that vitamin C increases (nonheme) iron absorption, especially when iron status is low. Nonheme iron is the form of iron mainly found in grains. Since about 30% of WIC participants smoke and smoking compromises vitamin C status, there can be an indirect impact on iron status. These are additional areas of concern which need further review by the Food and Nutrition Service, but all of this underscores the need for standards for micronutrients which are aimed at optimal health and not merely at preventing deficiency. Obviously, reducing the number of LBW infants born to WIC mothers would have a significant positive impact on lowering health care costs.

Micronutrient Intake Levels for Women of Childbearing Potential:

Regarding adults generally, including women of childbearing potential, FDA has indicated its intent to reverse its position with regard to folic acid and has raised its proposed value from 180 micrograms back to the current US RDA level of 400 micrograms. However, for the adult category, FDA still intends to lower the reference standards for a number of the micronutrients. Thus, vitamin B12 would be decreased by 66%; vitamin E by 50%; vitamin A by 33%; vitamin B6 by 25% and iron by 17%.

Micronutrient Levels for Young Children:

The WIC program also serves children less than 4 years of age. Scientists are finding that many of the chronic diseases which manifest themselves later in life, begin at a very early age. For example, fatty streaks have been found in the arteries of two year olds at autopsy. FDA has indicated its intent to decrease several of the micronutrient standards for children between one and four years of age. The intended reductions include a 77% decrease in vitamin B12, 75% decrease in folic acid; 47% decrease in vitamin A and a 13% decrease in vitamin E. While there are no data available suggesting that intakes of vitamins and minerals below the present US RDAs are beneficial, there are over one hundred studies which show that the higher intakes of certain micronutrients are associated with significant reductions in the risk of cancer and cardiovascular disease, infections and cataracts.

Conclusions:

Because of the growing body of research pointing to the prevention of a number of chronic diseases, including cancer and cardiovascular disease in people with the highest intakes of dietary antioxidants such as vitamins E, C and beta carotene, as well as potential for increasing the risk of atherosclerosis with lowered intakes of vitamins B6, B12 and folic acid, the Food and Nutrition Board of the National Academy of Sciences has scheduled a meeting in June, 1993 to discuss the rationales for the RDA. Therefore it appears prudent to allow the long-standing US RDA levels to remain in place, especially for women of childbearing potential, and pregnant and lactating women.

It is proposed that the WIC Director review the nutritional impact that lowered US RDAs could have on the nutritional status and possible short and long-term health consequences for women and children enrolled in the WIC program.

We also propose that a pilot study be initiated to determine the health effects of the distribution of folic acid-containing multivitamin supplements containing 100% of the present US RDA levels on the birth outcomes of women enrolled in the WIC program.

Vitamin C and US AID Grain Products:

While not uncommon in the US, iron deficiency anemia is a major problem in countries receiving US AID assistance. Vitamin C has several essential roles in the body. Research demonstrates that vitamin C, consumed at a level of 25 - 50 mg with a meal, enhances the absorption of nonheme iron. The grain products provided to countries receiving US AID assistance, contain high concentrations of nonheme iron, which is not readily bioavailable. Vitamin C, incorporated into the grain mixes, significantly increases the bioavailability of nonheme iron. Therefore, it is proposed that the level of vitamin C in US AID products be increased from 40 mg/100 g to 100 mg/ 100 g of product (about 30 mg/oz), in order to increase the bioavailability of nonheme iron, especially for those at the greatest risk of iron deficiency. Iron deficiency anemia, among its many adverse effects, is a major cause of maternal mortality, decreased cognitive function in young children, significant reduction in work capacity and increased risk of infection.

EXPORT PROGRAMS

WITNESS

JOE HAMPTON, U.S. AGRICULTURAL EXPORT DEVELOPMENT COUNCIL

Mr. DURBIN. Joe Hampton with the U.S. Agricultural Export Development Council from Moultrie County, Illinois.

Mr. Hampton, welcome.

Mr. HAMPTON. Mr. Chairman, my name is Joe Hampton. I am a feed grain, soybean and livestock producer from Windsor, Illinois and the immediate past chairman of the United States Meat Export Federation. I am also past chairman of the Illinois Corn Marketing Board and have served on the board of directors of the National Corn Development Foundation and the U.S. Feed Grains Council but I appear before you today as the spokesman for the U.S. Agricultural Export Development Council.

The council has 80 members who introduce, promote and expand for U.S. agricultural and forestry products worldwide.

Most importantly, I have come before you as a farmer who has been directly involved in export market development and can tell you personally what these programs have meant to me and why they are important to the continued livelihood of all agricultural producers in the United States.

The record for agricultural exports has been good for the United States and Americans: $39 billion in worldwide sales, a net positive trade balance of $18 billion creating an estimated 860,000 off-farm jobs for the U.S. economy.

But the competition is strong and other nations are assisting their agricultural industries with elaborate support systems that affect competitiveness. The efficiency and entrepreneurial and technological leadership of U.S. producers sets the world standard that barriers, tariffs and outright closed borders take years to overcome. Markets tend to close and open all the time around the world. That is why it is necessary to constantly have the right people in the right places to identify opportunities, to respond to crises and serve the trade.

It is imperative that we maintain an ongoing presence in countries around the world that has the ear and respect of government, industry and trade officials.

Consider that agriculture represents 16 percent of the United States' gross national product and generates an estimated 21 million jobs. I submit that the basis for economic health in rural America rests squarely upon our ability to develop and maintain worldwide markets for the tremendous productive capacity of U.S. agriculture.

Because of the efficiency of U.S. agricultural producers, the U.S. consumer spends a world low 12 percent for food and still nearly one of every three acres is produced for export. More U.S. acres are devoted to feeding Japan than Japanese acres are devoted to feeding Japan. One of every two rows of soybeans are produced for export. Nearly one-third of all corn is produced for export.

The E.C., with agricultural production at almost one-half the value of U.S. agricultural production, is spending $11 billion subsidizing exports.

While corn producers in central Illinois receive $2.15 per bushel, dairy farmers at the foot of Mt. Fuji are paying $9.00 per bushel due to distorted trade practices. French farmers are demonstrating about $5.50 corn and $14.50 soybean prices and E.C. policies keep lower priced U.S. grains out of the market.

Australians are spending $25 million in Tokyo alone promoting beef. The entire MPP funding for world red meat promotion was $11.3 million and despite this, we are gaining market share.

Although everyone talks about the competitiveness of U.S. agriculture, we are at a time when talk becomes cheap. It takes money to support agriculture in world markets. To develop initiatives, to maintain a presence, to meet the competition and to be world-class competitors, we need constant and increasing support to continue to compete and increase results.

The USDA is not working alone in its efforts to develop foreign markets for U.S. agricultural products. In fact, USDA programs have worked effectively to pull the private sector into export markets and to enlist private sector investments in export programs. Producer funded checkoff programs for corn, wheat, soybeans, beef and pork are all excellent examples.

In the red meat sector alone, industry support has increased 400 percent since MPP money was first received in 1987 and now stands at $9.1 million, about half of what this sector receives from USDA export programs. This is not a case where the private sector has grown dependent on government dollars but rather a partnership that has grown in strength to find opportunities and to fight unfair competition.

Together, federal funding and funding from the private sector have given industry the critical mass necessary to succeed in new and emerging export markets.

In conclusion, Mr. Chairman, agricultural exports are good for America and benefit the economy by providing economic stimulus and jobs. Exports not only help farmers, they also influence the non-farm sector of the economy. This factor is often ignored in the farm export program debate.

The 1990 Farm Bill required farmers to seek more income from the market and rely less on domestic government support programs. Although support programs were dramatically reduced, the government has not provided agriculture with the strength and tools and policies necessary to garner more income on domestic and export markets.

For U.S. agriculture to benefit from the international market, it is important that Congress invigorate the programs that are designed to increase agriculture's competitiveness and its ability to develop and capture new markets overseas.

Programs such as the Foreign Agriculture Service, the Foreign Market Development Program, Market Promotion Program, the Export Enhancement Program, Food for Peace and the Export Credit Program are all of vital importance to capturing and maintaining markets for U.S. agricultural products.

The future of U.S. agriculture rests in foreign markets. To cut off FAS programs and budgets at this critical juncture is to turn away from the country's commitment to provide its trading partners with a consistent and dependable supply of high quality agricultur-

al products. And, with the Uruguay Round pending, it would also send the worst possible signal to those like the European Community to resist U.S. efforts to cut farm subsidies and continue to use export restitutions to secure export markets and tilt the playing field to their advantage.

I have submitted our recommendations for funding of U.S. export promotion programs and have participated in this hearing because I believe in these programs. They are the most effective tools that we have to increase U.S. exports of agricultural commodities and in doing so increase U.S. farm incomes and preserve rural America. Unless we have your support for the funding levels we are proposing, exports and the competitive position of U.S. agriculture will suffer irreparable damage.

I would like to express on behalf of the council my gratitude to the committee for the strong support you have given to export promotion, market development and trade policy initiatives.

Thank you again for the opportunity to appear before you today.

Mr. DURBIN. Thank you, Mr. Hampton. You and I are on the same wavelength about international trade and how critically important it is to American agriculture. Our programs are good, I think we can make them better. We are trying through this subcommittee to push some of these programs in directions that might make them not only productive but also more politically acceptable.

I recall the work of this subcommittee last year on the Market Promotion Program, a program that had been under a lot of criticism. We attempted to steer that program more toward value added products, realizing that as we did that, more and more people would take an interest in it. If it is simply a raw commodity going overseas, farmers and commodity groups are interested. But if it involves value added, you get folks in town interested, too, because they are working on it as well.

You did not mention in your oral testimony but I note in your statement a reference to the situation in the former Soviet Union. We are all having our fingers crossed and hope that that ends well there but I think we all understand how critically important that aspect of trade has been, to the overall picture. So I hope we can maintain our good relationship, good trade relationship with the former Soviet Union and see them through these difficult times. It means an awful lot to everybody.

Mr. HAMPTON. To all of us.

Mr. DURBIN. Yes, it sure does.

Mr. HAMPTON. And the world.

Mr. DURBIN. Thank you for coming today. And thanks for your patience in waiting.

Mr. HAMPTON. And we are at your disposal if there are any questions.

Mr. DURBIN. Give my regards to central Illinois.

Mr. HAMPTON. Thank you.

[The information follows:]

STATEMENT OF

Joe Hampton

on behalf of the
U.S. Agricultural Export Development Council
before the
Sub-Committee on Agriculture, Rural Development, Food & Drug Administration
and Related Agencies, Committee on Appropriations
United States House of Representatives
Wednesday, March 24, 1993

Mr. Chairman, members of the subcommittee, my name is Joe Hampton. I am a corn producer from Windsor, Illinois and am the immediate past Chairman of the Meat Export Federation. I am also the past chairman of the Illinois Corn Marketing Board and have served on the Board of Directors of the National Corn Development Foundation and the U.S. Feed Grains Council.

I appear before you today as the spokesman for the U.S. Agricultural Export Development Council. The USAEDC is an organization of eighty members working around the world to introduce, promote, and expand the demand for U.S. agricultural and forestry products.

The President will soon send to Congress the details of his budget for the coming fiscal year. I appreciate this opportunity to present to you our funding recommendations for fiscal year 1994.

Mr. Chairman, there is no question that strong agricultural exports are good for America. Not only do U.S. farm goods benefit the importing countries by providing better and more varied diets and a higher standard of living, they also benefit the whole U.S. economy by providing economic stimulus and jobs.

Overseas exports directly help the American farmer by providing additional marketing options and improved income opportunities. They also positively influence the non-farm sector of the economy. Unfortunately, this is a fact often lost in the farm export program debate. USDA estimates that U.S. farm exports support 860,000 full-time jobs. These are jobs in processing, packaging, transportation, and other services -- in addition to those generated by the production of the commodities for export. It is further estimated that for each dollar of U.S. farm goods exported, an additional $1.40 in economic activity is generated.

Moreover, U.S. agricultural trade surpluses have consistently offset the overall U.S. trade deficit. Agriculture remains this country's leading export earner. In FY92, U.S. farm sales abroad totaled $42.4 billion, up from $37.6 billion the previous fiscal year. The resulting agricultural trade balance for FY92 swelled to $18.0 billion.

Before I detail our funding requests for specific USDA-operated programs, I would like to emphasize that these benefits accrue at relatively little taxpayer expense. According to the latest USDA budget, the international program budget accounts for an estimated $8.7 billion compared to a projected total agricultural budget request for FY93 of $82.6 billion.

Continued Success Depends on Good Programs

As an organization dedicated to the goal of expanding U.S. agricultural exports, we are proud to report that those exports have consistently increased, despite the debt problems of the republics of the former Soviet Union. But I would like to caution this committee that future farm trade expansion will depend on a continued strong commitment to our existing programs and on providing USDA with the flexibility necessary to operate them at optimal levels.

The Foreign Agricultural Service

The Foreign Agricultural Service (FAS) plays a critical role in helping U.S. producers market their products overseas. It provides guidance and supervision to organizations like the USAEDC in developing a world-wide network of multi-commodity promotional programs, including business counselling, product exhibits, trade teams, trade services, market information programs, and trade referral services.

In addition to its other duties in advancing the export of U.S. farm products, FAS administers a variety of important commercial export programs vital to the continued success of our market promotion activities. These include: the foreign market development program; the marketing promotion program; the export credit guarantee programs; the export enhancement program; the sunflowerseed oil assistance program; and the cottonseed oil assistance program.

We note that since enactment of the 1985 Farm Bill, FAS and the Office of the General Sales Manager, have accumulated a combined export program portfolio of about $9 billion annually, double its previous size. Unfortunately, in the same years, FAS has been challenged to carry out its ever expanding tasks while having been besieged with budget cuts and audits. We believe that additional budget limits on FAS at this time would merely perpetuate outside criticisms of an agency trying to do too much, too quickly, with too few resources. It is the recommendation of the USAEDC that FAS be funded at a level of not less than $120 million for fiscal year 1994.

The Foreign Market Development Program

Since 1954, the Foreign Market Development Program (FMD) has proven to be an extremely useful long-term market opening program in many countries. It has been particularly valuable in promoting the export of bulk commodities, such as wheat, corn, and soybeans, which are traded all over the world, where buyers change frequently, and where processing industries are undergoing constant change. In contrast to programs conducted under MPP, FMD programs for bulk commodities are generally smaller and more focussed on technical assistance and market information. They are also less expensive because they do not necessarily involve market promotion, although they do require a virtually continuous presence in many countries in order to provide adequate trade servicing.

We recommend that the FMD program continue as a separate program and at its current funding level.

The Marketing Promotion Program

The Marketing Promotion Program (MPP) is designed to open new markets and improve sales of U.S. agricultural products. As such it is aimed directly at foreign consumers in markets where U.S. food, fiber, and forestry products need export promotion assistance. Priority consideration is provided to commodities injured by unfair trading practices.

In its short life, the MPP has more than proven its value. The MPP has helped to more than double U.S. exports of consumer-ready products from a level of $5.2 billion in FY85 to a level of $13.5 billion in FY92.

Not only has it led to increased exports of U.S. agricultural commodities, but it has also led to significantly increased U.S. economic activity. USDA impact analysis indicated that the increase in exports due to targeted promotion from 1986-1988 ranged from $2.00 to $7.00 for each $1.00 of program funding. When you consider an annual funding level of $200 million for the MPP, these multipliers yield an annual net increase in exports ranging from $400 million to $1.4 billion.

In addition, I would like to emphasize that nearly two-thirds of MPP funds are used for generic promotions. Although, given the increasing importance of value-added agricultural exports, the MPP has been shown to be an invaluable tool in the area of branded promotion. USDA estimates that of the $136 billion in high-value products traded globally in 1990, approximately 65 percent, or $88 billion, consisted of consumer-oriented products. Consumer-oriented products now represent the fastest growing sector of U.S. export trade in food and agricultural products. Nearly all consumer-oriented products are branded items or are processed by branded companies and that consumers make purchasing decisions most often on brand loyalty.

Like its predecessor, the Targeted Export Assistance (TEA) program, the MPP is a cost-sharing program to assist eligible commodity and trade organizations in conducting USDA-approved foreign market development programs. Furthermore, eligibility for promotional assistance is limited to products with at least 50 percent U.S. origin by weight. The 1990 farm bill authorizes MPP spending at $200 million annually, we respectfully request that this committee appropriate that amount for fiscal year 1994.

The Export Credit Guarantee Programs

According to USDA, export credit guarantees represent the largest share of agricultural export value, over 10 percent of total agricultural exports. The Export Credit Guarantee program or GSM-102, provides credit guarantees to importers for the short-term -- from six months to three years. The Intermediate Export Credit Guarantee program, or GSM-103 extends the credits to importers from a period of more than three years to up to ten years.

The 1990 farm bill authorized the CCC to annually provide at least $5.0 billion for the GSM-102 program and $500 million for the GSM-103 program through 1995. In FY92, $6.1 billion in GSM-102 export credit guarantees were announced for use in thirty-five countries, and U.S. exporters registered a record $5.6 billion in actual sales. This represents the largest amount of sales ever registered under the program. So far in FY93, USDA has announced GSM-102 allocations of about $4 billion to thirty-one countries.

The trend is similar for the GSM-103 program. In FY92, $229 million in guarantees were announced for use in ten countries. To date in FY93, GSM-103 credit guarantee announcements total $258 million to eight countries.

We recommend that the Committee closely review last year's budget request for a combined total of $5.5 billion for both the GSM-102 and GSM-103 programs. And we request that the FY94 allocation for GSM-102 be increased to a level of at least $7.0 billion and that the GSM-103 program be increased to a level of $750 million.

Export Enhancement Programs

The Export Enhancement Program, enacted in 1985, enables U.S. exporters to meet prevailing world prices for targeted commodities in targeted markets. The primary objective of the program has been and continues to be, to boost U.S. agricultural exports. Its ancillary goals have been to challenge the unfair trading practices of competing exporters, particularly the European Community and to encourage serious negotiations on agricultural trade under the auspices of the GATT.

Since its inception, there have been numerous criticisms of the EEP, many contesting its effectiveness. It is our strong contention, as marketers of U.S. commodities, that the EEP has made possible sales of U.S. agricultural products that may not have otherwise been made due to the presence of subsidized prices in the world market. The program has met its primary objective. EEP-assisted

sales have annually accounted for up to 65 percent of U.S. wheat exports, 88 percent of flour exports, 98 percent of barley exports, 10 percent of barley malt exports, 12 percent of semolina exports, 6 percent of rice exports, 22 percent of vegetable oil exports, 29 percent of frozen poultry exports, and 69 percent of table egg exports.

Last year, this committee removed the ceiling on the EEP and provided the Department of Agriculture with the necessary flexibility to maximize the effectiveness of the program. As of February 11, 1993, USDA had used over $513 million in its operation of the EEP. At that time, the EEP had resulted in 147 initiatives targeting over 97 countries for the sale of U.S. commodities. We request that the funding for EEP remain uncapped for FY94

The sunflowerseed oil assistance program and the cottonseed oil assistance program should also continue to be used to encourage the sale of additional quantities of these commodities in world markets at competitive world prices through the payment of bonuses to exporters. The 1990 farm bill authorized $50 million for the operation of these programs in each of the fiscal years 1993 through 1995. We support the appropriation of the authorized amounts for FY94.

The Food for Peace Program

Developing countries represent our largest potential for long-term growth in export markets. The food assistance programs administered by FAS have long been an important link between our producers and the lesser-developed and developing countries. These important programs generally fall under the umbrella of the Food for Peace Program.

PL-480 or the Food for Peace program is the primary means by which the U.S. provide food assistance to countries in need. Since 1954, PL-480 has had an excellent record in supporting the market development, economic, humanitarian, and other objectives of the United States. Realizing the need for the use of concessional sales programs to establish marketing relationships in Eastern Europe and the republics of the FSU, we recommend that the committee fund the PL-480 food aid programs at no less than its current level of $1.486 billion for FY94.

Conclusion

Before concluding, I would like to briefly mention trade with the republics of the former Soviet Union (FSU). Since November 24, 1992, the FSU has been suspended from the GSM-102 program and most commercial activity with the republics has come to a standstill. This is an untenable situation. If the lull in trade with the FSU persists, the already serious backlog in the grain marketing system will be compounded by supplies from the new harvest. These excess supplies will surely depress farm gate prices and increase the costs of government price and income support programs.

Sadly, I am unable to present to you a solution to this critical problem. Clearly, immediate action must be taken to restart trade with the FSU and our organization stands ready to assist this committee and any other in advancing a cohesive and realistic plan.

Finally, I would like to express on behalf of the USAEDC my gratitude to this committee for the strong support you have given to export promotion, market development, and trade policy initiatives. Thank you again for the opportunity to appear before you today.

I will be pleased to answer any questions you may have at the appropriate time.

AGRICULTURE PROGRAMS

WITNESS

GARY TAYLOR, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Mr. DURBIN. Max Peterson with the International Association of Fish & Wildlife Agencies.

Mr. TAYLOR. Thank you, Mr. Chairman. My name is Gary Taylor. I am legislative counsel for the International Association of Fish & Wildlife Agencies and I am here for Max Peterson.

Mr. Chairman, as you may be aware, the Association represents the public agencies charged with the protection and management of North America's fish and wildlife resources, especially the 50 state fish and wildlife agencies.

As you may also be aware, Mr. Chairman, except where Congress has reserved certain authorities to the Federal Government, the states in the United States retain the authorities for fish and wildlife conservation and stewardship in this country.

Mr. Chairman, you have our testimony and I would like to just highlight a few brief points, starting off with a request that we have the opportunity to submit supplemental recommendations once the president's budget is submitted to Congress.

Mr. DURBIN. Certainly. I hope you will. That will help us.

Mr. TAYLOR. Thank you, Mr. Chairman.

The Association appreciates the action of Congress in providing funding to encourage conservation and stewardship of agricultural lands through many programs and we fully appreciate the role of the agricultural landowners as managers of much of the habitats on which this nation's fish and wildlife resources depend.

As a general observation, the association recognizes that farmers and agricultural landowners need the technical assistance of natural resources conservation agencies to carry out farm plans once the plans are drafted. We urge that Congress continue to support enhanced funding to assist farmers in implementing the conservation plans which will help meet objectives of both commodity crop production and wise stewardship of our natural resources on agricultural lands.

We encourage appropriations actions that will incrementally accelerate meeting the conservation objectives of the 1985 and 1990 Farm Bills, especially the Conservation Reserve and the Wetland Reserve Programs.

Specifically relating to the Wetland Reserve Program, we encourage and support the recognition that this program become national in scope and recommend a fiscal year 1994 appropriation level of a minimum of $350 million.

We strongly encourage accelerating enrollment in this program to a minimum level of 350,000 acres in 1994 to get at least part way back on schedule. As you are aware, Mr. Chairman, the 1990 Farm Bill envisioned 400,000 acres being enrolled in this program by 1993. We are a bit behind schedule.

The association continues to recommend that any funds not expended in fiscal year 1994 continue to be carried over to help support national program efforts in subsequent fiscal years.

The association urges that the fiscal year 1994 appropriations actions by Congress reflect the Soil Conservation Services needs for technical support for conservation operations and administration compliance with provisions of the 1985 and 1990 Farm Bills. These efforts should be carried out at a level to ensure that all conservation plans are implemented by the end of 1994, thereby assisting the agricultural producers to remain eligible for the USDA program benefits.

And, finally, Mr. Chairman, the association would like to comment APHIS and the Animal Damage Control Program on the progress that has been made to date and the transition of this program from the Department of the Interior to the Department of Agriculture but recognizes also that it is still underfunded and understaffed as it was at the time of transfer. A progressive Animal Damage Control Program which reduces the adverse impact of wildlife populations is necessary to maintain the support of both the agricultural community and the general public and to counter increasing pressures for indemnity due to wildlife damages.

The ADC can be progressive, responsible and successful only if adequately funded. We urge that the fiscal year 1994 appropriations of Congress reflect a commitment to ensuring the continued progression and the Animal Damage Control Program's professional evolution and recommend that prior reductions be restored to operations.

We further recommend that additional funds be appropriated to implement initiatives aimed at rebuilding the program's infrastructure and to implement the environmental impact statement.

Thank you, Mr. Chairman, for the opportunity to appear before your committee.

Mr. DURBIN. Mr. Taylor, do you have any opinion on the wetlands program? I have a lot of my farmers that think that it has become almost impossible to define a wetland and tough to deal with the agencies that are supposed to be working with them to protect them.

Mr. TAYLOR. Mr. Chairman, on the Wetlands Reserve Program, we feel that the incentives and initiatives offered under this program are a very appropriate way to encourage stewardship of wetlands conservation without necessarily imposing regulatory mandates on the agricultural landowners.

Mr. DURBIN. But I might interrupt you and say very expensive.

Mr. TAYLOR. Well, the expense, Mr. Chairman, from our perspective, needs to be kept also in the perspective of the cost to this nation of the loss of those wetlands also and benefits to water quality, to flood control, to fish and wildlife resources which all of the public enjoys and we fully recognize that agricultural landowners, as landowners, bear the burden of supporting these fish and wildlife populations that depend on wetlands and that is why we encourage the program not only of regulatory mandates but also incentives, initiatives and education at all levels of government and I would be happy to send you our testimony from the last Congress on the wetlands issue in general, if you would be interested.

Mr. DURBIN. I would like to see that.

Mr. TAYLOR. Okay.

Mr. DURBIN. We share the same goals, we have limited resources and we are trying to find the best way to approach them in a cost effective way and I would like to see your testimony. It would be helpful.

Thanks for joining us today. We appreciate it.

Mr. TAYLOR. Thank you, Mr. Chairman.

[The information follows:]

STATEMENT SUBMITTED TO THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION AND RELATED AGENCIES ON THE FISCAL YEAR 1994 APPROPRIATIONS FOR THE AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE, SOIL CONSERVATION SERVICE, ANIMAL AND PLANT HEALTH INSPECTION SERVICE, EXTENSION SERVICE AND AGRICULTURAL RESEARCH SERVICE

by R. Max Peterson, Executive Vice President
International Association of Fish and Wildlife Agencies
March 24, 1993

The International Association of Fish and Wildlife Agencies, founded in 1902, is a quasi-governmental organization of public agencies charged with the protection and management of North America's fish and wildlife resources. The Association's governmental members include the fish and wildlife agencies of the states, provinces, and federal governments of the U.S., Canada, and Mexico. All 50 states are members. The Association has been a key organization in promoting sound resource management and strengthening federal, state, and private cooperation in protecting and managing fish and wildlife and their habitats in the public interest. The Association appreciates the opportunity to share our perspectives with you.

Recognizing that the President's FY 1994 budget has not yet been submitted to Congress, Mr. Chairman, our comments will be somewhat general regarding areas of concern to the Association. We respectfully request the opportunity to provide written supplemental recommendations on each of the agencies' budgets once they are released.

Congress has provided funding to encourage conservation stewardship of agricultural lands through many programs, and the Association fully appreciates the role of the agricultural landowners as managers of much of the habitats on which this nation's fish and wildlife resources depend. As a general observation and comment, the Association recognizes that farmers and agricultural landowners need the technical assistance of the natural resource conservation agencies to carry out the farm plans once they are prepared. We urge that the Congress continue to support enhanced funding to assist farmers in implementing the conservation plans which will help meet the objective of both commodity crop production and wise stewardship of our natural resources on agricultural lands.

AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE (ASCS)

An adequately funded budget for the Agricultural Stabilization and Conservation Service, as well as the Soil Conservation Service and the Fish and Wildlife Service, is essential to effectively implement the conservation provisions of the 1985 Food Security Act (FSA) and the 1990 Food, Agriculture, Conservation and Trade Act (FACT). ASCS programs have tremendous and quantifiable impacts on natural resources and yield substantial public as well as private benefits.

The Association compliments ASCS' efforts to seek funding to implement these programs featuring the Administration's wetland and water quality initiatives. We urge that the Congress make appropriations reflecting the USDA and ASCS commitments to those programs.

The Association encourages and supports the recognition that the Wetlands Reserve Program (WRP) program become national in scope and recommends an FY 1994 appropriation level of a minimum of $350 million. Only 50,000 acres have thus far been enrolled in the WRP, even though the 1990 Farm Bill envisioned 400,000 acres enrolled by 1993. The administrative details of the program have now been worked out and we strongly encourage accelerating enrollment to a minimum level of 350,000 acres in 1994 to get part way back on schedule. The Association recommends that any funds not expended in FY 1994 continue to be carried over to help support the national program efforts in the subsequent year.

The multi-year cost-share provisions of the 1990 FACT set asides are funded through the Commodity Credit Corporation (CCC). The program provides 25 percent cost-share assistance to landowners for the establishment of perennial cover on set-aside lands under a multi-year contract. While a funding authorization is made by ASCS related to this program, it does not necessarily limit funding through the CCC. The Association recommends continued appropriations be provided for multi-year set-aside cost-share assistance with specific report language clarifying legislative intent that funds can be used in states where annual cover requirements are not mandated due to summer fallow.

In addition to its conservation programs, ASCS administers a major $6-10 billion commodity program that affects more than 220 million acres of commodity cropland base. This includes more than 40 million acres that are idled annually under the Annual Conservation Reserve (ACR). This program should explicitly support the Administration's water quality initiative. The 1990 FACT requires perennial vegetative cover on 50 percent of ACR lands to reduce soil erosion, help abate flow of agriculture contaminants to groundwater and surface waters, and to provide wildlife habitat. Implementation is essential to ensure optimum public benefits from sizable taxpayer expenditures in USDA commodity programs. The Association encourages ASCS to continue allocating CCC funds to this multi-year perennial cover cost-share.

The Association urges that Congress continue to support an adequate funding level that ASCS provides to SCS for technical assistance required for the Conservation Reserve Program (CRP) and Wetland Reserve Program (WRP). The increased funding will permit a more adequate number of staff years to support these two programs. These increases directly correspond to ASCS priorities in their conservation efforts and will assist in implementing and enforcing the conservation provisions of sodbuster and swampbuster along with CRP and WRP.

The sunset clause for the Forestry Incentive Program is up for review in 1995. Requests for services from this program outstrip the funds available to meet the needs. The Association recommends that Congress direct USDA to outline both the accomplishments of FIP and future needs, so that the program may be reauthorized in the 1995 Farm Bill.

The Association strongly recommends that in the FY 1994 and future budgets, ASCS continue to review program expenditures and redirect, wherever feasible, funds from short-term to long-term conservation practices.

SOIL CONSERVATION SERVICE (SCS)

The Soil Conservation Service has immense responsibilities for implementing the conservation provisions of the 1985 Food Security Act (FSA) and the 1990 Food, Agriculture, Conservation and Trade Act (FACT); for addressing the non-point source pollution mandates of the 1987 Water Quality Act; and for meeting the nation's wetland policies. However, several previous Administration budget requests have reduced SCS budgets and staff years for these responsibilities. The Association does not support these budget decreases, especially in the area of technical assistance, which addresses the full range of conservation problems and opportunities that exist on the Nation's farms and ranches. We urge that, at a minimum, Congress increase appropriation above the FY 1993 level adequate to meet the increasing responsibilities of the SCS.

The Association realizes that most wetland mapping is being performed on a case-by-case basis. However, we believe that the need for these maps is much broader and urge SCS to proceed as soon as possible to complete wetland mapping, under the guidance of the wording of the 1990 FACT. The Association supports an SCS goal of expeditiously completing the wetland determinations required to implement the swampbuster provisions of the 1985 FSA and the 1990 FACT. Landowners need to know what portion of their land is wetland under the 1990 Act. The Association wishes to work with SCS to help achieve these goals.

The Association urges that the FY 1994 appropriations by Congress reflect SCS' needs for technical support for conservation operations and administration compliance with provisions of the 1985 and 1990 Farm Acts. These efforts should be carried out at a level to ensure that all conservation plans are implemented by the end of 1994, thereby assisting producers to remain eligible for USDA program benefits.

The Association reiterates its support for small watershed planning and appropriate installation of planned practices, as well as the Resource Conservation and Development Projects, with special emphasis on land treatment and water quality management. These programs provide enhanced wetland functions to retain floodwaters, improve water quality and quantity, and provide fish and wildlife habitat. These activities require state and local matching funds and are therefore leveraged to provide greater conservation benefits for each federal dollar spent while promoting valuable partnerships among states, local agencies, and other organizations.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

The wildlife control activities of APHIS are based on the principles of wildlife management and integrated damage management and are carried out cooperatively with State fish and wildlife agencies. Most APHIS operational work is cost shared between the Federal Animal Damage Control (ADC) program, State and county governments, agricultural producers, and other cooperators.

The cooperation and support of the agricultural community is essential to maintaining wildlife populations because much of the Nation's wildlife exist on private, agricultural lands. A progressive animal damage control program which reduces the adverse impact of wildlife populations is necessary to maintain the support of the public and to counter increasing pressures for indemnity due to wildlife damage.

The Association commends APHIS/ADC on the progress made to date in the transition of ADC from the Department of the Interior to the Department of Agriculture, but notes that it is still underfunded and understaffed, as it was at the time of transfer. ADC can be progressive, responsible, and successful only if adequately funded.

The Association urges that the FY 1994 appropriations of the Congress reflect a commitment to ensuring the continued progression in ADC's professional evolution, and recommends that prior reductions be restored to operations. The Association further recommends that additional funds be appropriated to implement initiatives aimed at rebuilding the program's infrastructure and to implement the environmental impact statement.

EXTENSION SERVICE -- U.S. DEPARTMENT OF AGRICULTURE

The Association has been historically disappointed by the continued lack of attention by USDA to the increasing critical need for natural resource and environmental stewardship education targeted to private landowners and managers (urban and rural), 4-H youth and the general public. The Association believes that USDA and the Congress must consider the mandates established by Congress in the 1990 FACT Act, specifically in dealing with urban and community forestry, with education in natural resources, and the Renewable Resources Extension Act itself. We urge that the Congress' appropriations actions reflect a renewed commitment to meeting the mandates of the 1990 FACT.

The Association recommends that the Renewable Resources Extension Act be funded at a minimum level of $10 million in FY 1994. This Act passed in 1978, with an authorization for $15 million and has been reauthorized to the year 2000. It was first funded in 1982 at $2 million, and was increased to $2.765 million in 1988, where it has remained. These limited funds, when apportioned to State Cooperative Extension Services (CES's), have been effectively leveraged with cooperative partnerships at an average of about three to one, with a focus on dissemination of educational programs to private landowners (rural and urban). However, this

limited funding for RREA has not enabled CES to develop the critical mass of natural resources expertise in many states to address clientele needs.

The Association recognizes the capability of the Cooperative Extension System to effect positive change in landowners, managers, community decision makers, and the public in their attitudes about the environment and their capabilities to implement new management technologies to sustain a viable natural resource base and a competitive and profitable agriculture. Given that over two-thirds of the lands in the contiguous United States, approximately 1.35 billion acres, are controlled by private landowners and managers, including approximately 71 percent of all forest lands, 74 percent of all wetlands, 64 percent of all rangelands, and almost all of the agricultural lands, it is most appropriate that the Cooperative Extension System, with its grass roots credibility and delivery system, be adequately funded to help the Nation towards a sustainable society.

AGRICULTURAL RESEARCH SERVICE (ARS)

The Agricultural Research Service's (ARS) structure into six broad objectives presents numerous opportunities for research on many important problems affecting agriculture and the resources they support. The Association is particularly interested in the work being done on the development of technologies to protect the environment and the natural resource base.

The ARS base program objective affecting soil, water and air are among the programs most important to the Association. These programs conduct important research on water quality, and agricultural conservation systems to retain soil and reduce runoff and erosion. The 1990 Food, Agriculture, Conservation and Trade Act (FACT) made enormous strides towards improved conservation of the water resources of this country. It is critical that appropriate research be conducted to ensure that the benefits of that legislation be realized. Although much of the research that ARS is presently conducting will address this issue, the funding levels have historically remained woefully low. The Association urges that the Congress begin to remedy this in their FY 1994 appropriations action.

The Association is also most interested in the work being done by ARS on the Integration of Agricultural Systems. The Association recognizes that some of the most important strides in agricultural research will likely occur in this arena. Cost effective farming systems are available, however, research needs to be done on how to extend these practices to other areas. There is a pressing need to develop practices such as no-till farming and sustainable agriculture which would be made available to the majority of U.S. farmers. It is for these reasons that the Association recommends appropriation enhancement above level funding for this item in FY 1994.

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More information is needed on the impact of large grazing animals and the relationship of livestock and wildlife use on rangelands. Better understanding of natural rangeland ecosystems -- and how to manage them -- is a complex but researchable problem with high potential for payoff in terms of multiple outputs and environmental quality. Work is needed to develop criteria for monitoring plant, soil and microbial relationships in the face of global, regional and local change. Decision support systems using modern computer-based techniques need to be developed. We recommend enhanced appropriation attention to this item to enable ARS to begin filling tne gaps in knowledge, working in concert with State Agricultural Experiment Stations, Universities and the Forest Service.

CONSERVATION PROGRAMS

WITNESS

FERD HOEFNER, SUSTAINABLE AGRICULTURE COALITION

Mr. DURBIN. Ferd Hoefner with the Sustainable Agriculture Coalition.

Welcome.

Mr. HOEFNER. Thank you, Mr. Chairman. We welcome this opportunity to testify today. I am Ferd Hoefner, Washington representative for the Sustainable Agriculture Coalition.

Our midwest coalition has been working together on federal policy reform in agriculture for six years now and we are now working more closely with a broader network of regional sustainable agriculture working groups and sustainable agricultural farmer associations throughout the country.

In the research and extension area, we urge the subcommittee to substantially increase funding through CSRS for the Sustainable Agricultural Research and Education Program. In our opinion, the SARE program now has a proven six-year track record of making high payoff investments in critical technologies for the future of agriculture.

We also urge you to provide sufficient funds to begin the closely associated Sustainable Agriculture Technology Development and Transfer Program through the extension service.

As you may remember, last year, a consensus document on the overall shape and format of this program was agreed to by a wide variety of agricultural interests and by the extension directors. Since then, more specific planning has begun in each of the four extension regions.

As another subcommittee of this committee considers 100 new training centers for industry under the president's investment package, we hope that this subcommittee might be able to invest in at least four agricultural training centers.

In the conservation program area, we continue to urge the consolidation of ACP water quality activities under the Water Quality Incentive Program and urge you to approve a $50 million Water Quality Incentive Program and also urge you to urge the department to issue proposed rules or guidelines for the program as soon as possible. They are overdue.

We have two recommendations related to the Conservation Reserve Program. First, we urge you to focus new enrollments on high payoff, partial field enrollments of conservation practices as provided for in the authorization. But secondly we also urge you to work with the authorizing committee to allow limited economic use in the last years of CRP contracts in return for lower rental payments. Also, to allow for bid backs of the less marginal land that did get enrolled into the CRP and might be willing to be bid out at this point under strict conservation guidelines.

Together, these three proposals would create a more targeted, a more long lasting and a lower cost CRP.

We urge you to fund the Wetlands Reserve Program and we strongly endorse the million acre goal for the program. However, we think at this point, due to the slow start-up, that it would be

wise to extend the target deadline for that program by at least two years and therefore spread out the funding over more years.

We strongly support funding for the WIC Farmers Market Nutrition Program and for the National Organic Program.

And, finally, in closing, we urge you to reject the proposed cut in direct Farmers Home farm lending. A further shift to guaranteed loans will not in our opinion help beginning farmers or low income farmers and may well end up costing more in the long run than the direct loan program.

Mr. DURBIN. Thanks, Mr. Hoefner. Testimony earlier suggested we were paying an average of $923 an acre for wetlands for this program which as we get close to $1 billion in cost is quite a challenge for this committee to fund, even though we certainly understand the goals and I feel very strongly about them.

We are going to try to work with the various groups interested in conservation to take the resources we have and spend them effectively and see what we can do to not only protect wetlands but also to focus on water quality, which I think is a concern of both of ours.

Mr. HOEFNER. It is critical. I could say that last year we brought together a group of farmers and environmentalists from across the midwest to talk about wetlands—everything, not just wetland reserves—and out of that meeting came a working document that dealt with most of the issues and wetland reserve was a critical point there but I will forward that to the subcommittee staff.

Mr. DURBIN. We would like to see it. I think that is a good idea, to get those groups together. They have a lot more in common than most people realize.

Mr. HOEFNER. It was hard work but after several days we reached consensus on every issue.

Mr. DURBIN. Good for you. We need you around Congress once in a while, too.

Thanks for joining us.

[The information follows:]



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Statement of Ferd Hoefner
Washington Representative
Sustainable Agriculture Coalition
presented to
Subcommittee on Agriculture, Rural Development, and Related Agencies
Committee on Appropriations
U.S. House of Representatives
March 24, 1993

We welcome this opportunity to once again appear before the Subcommittee. I am Ferd Hoefner, Washington Representative for the Sustainable Agriculture Coalition, a coalition of ten midwestern farm based groups committed to policy and program reform help lead US agriculture in a more sustainable direction. We are part of a larger and growing network of sustainable agriculture and allied farm, conservation, and consumer organizations that have organized as Sustainable Agriculture Working Groups (SAWGs). There are now active SAWGs in the Northeast, Southeast, Midwest and Northern Plains, and Northwest and Inter Mountain regions, and a growing number of sustainable agriculture farmer associations throughout the country with whom we communicate.

Our specific program requests and comments fall into four areas: research and extension, marketing, conservation, and farm credit.

Research and Extension

We support the President's proposed increased investment in agriculture research, but strongly urge that a more balanced package be pursued. Over the next two years, we believe that the currently underfunded **Sustainable Agriculture Research and Education Program (SARE)** should receive substantial additional funds, reaching the authorized $40 million by FY 95. In addition, we strongly support the currently unfunded **Sustainable Agriculture Technology Development and Transfer Program (SATDTP)** and believe it too should reach the authorized level of $20 million by FY 95.

The SARE program now has a proven six-year track record of being a high payoff investment in critical technologies for the future of agriculture. Through research and demonstration, SARE has effectively addressed farm economic and environmental issues and has now also begun to look more closely at quality of life issues in response to congressional directives. SARE utilizes a partnership approach among scientists, universities, farmers, industry, government, private research institutions and other non-profit organizations that qualifies it as an important model for re-inventing government. Funds have been so limited, however, that rejection rate for high quality, top rate projects has been much higher than most other research programs.

Plans for the new Technology Development and Transfer Program have been developing rapidly. As the Subcommittee is aware, last year a consensus document was prepared by a wide variety of agricultural interests providing an overview of how the program would work. Since then, more specific plans of program operation have started to be put together in each of the four Extension regions. Detailed program guidelines are being developed by USDA and should be available in the near future.

We urge the Subcommittee to provide sufficient funds to begin a credible program in each of the regions, including a training center and a variety of satellite training and demonstration sites, so that at least the training component of the program can become operational in FY 94. Improved training of Extension, SCS, and ASCS personnel, as well as other natural resource professionals, in sustainable agriculture technologies and systems, is critical in our view to program delivery and to the capacity of the agencies to respond to the new demands being placed on them in areas such as conservation compliance, clean water, integrated pest management, and the like. Improved technology development and transfer, fully integrated with the research agenda, is also critical to family farm survival.

We also endorse the **minority farmer outreach program** authorized by the 1990 farm bill and encourage full funding at $10 million. This program recognizes USDA's failure to adequately meet the needs of minority farmers in program design and delivery and establishes a partnership between the agencies and universities and community-based organizations that have long track records working with minority farmers to improve program outreach.

Conservation and Environment

We continue to support the **Water Quality Incentive Program** (WQIP), the voluntary, incentive-based program to help farmers comply with state and federal environmental regulations by

providing technical and financial assistance in preventing pollution of surface and ground water. We again urge you to consolidate water quality ACP cost-share funds into WQIP, an investment of $30 million at current levels, and to raise this by $20 million, for a total program of $50 million. If the program is retained within ACP, we thus recommend a total ACP funding level of at least $215 million, but we encourage you to consider a separate payment limitation for WQIP. We also encourage you to ask the Department to issue proposed rules or guidelines for the overall program in the near future.

Regarding the **Conservation Reserve Program (CRP)**, we urge you to provide funding for new enrollments, but with a very strong emphasis on partial field enrollments of special conservation practices (contour grass strips, sod waterways, filter strips, windbreaks, etc.), as now provided for by law. Such an emphasis would provide for a higher payoff CRP, more targeted to water quality, yet would keep farmland in production and in the long run would provide more lasting protection.

In addition, we encourage you to work with the authorizing committee to provide for funds to flow back into CRP by (a) allowing CRP participants in the last years of their contracts to trade lower CRP payments for limited economic use of their land, and (b) providing for a CRP "bid-back" system whereby less marginal land in CRP could be brought back into production under strict conservation standards before the end of the contracts. As a package -- new partial field enrollments, limited economic use in later years, and a bid-back system -- these proposals would create a more targeted and more long lasting CRP at lower cost.

We continue to strongly support the **Wetlands Reserve Program (WRP)**, the long-term easement program to pay farmers for restoring wetlands and adopting wetland conservation plans. The WRP is a crucial component of the overall wetlands preservation effort. We support funding at levels that allow the full, congressionally mandated one million acres to be enrolled. We would suggest, however, given the lack of funding in the current year that this Subcommittee work with the authorizing committee to extend the enrollment target by two years, to 1997. If this can be done, then funding at approximately $220 million for four years would allow the million acre goal to be reached at currently cost projections.

We also endorse continued funding of the **Water Bank** program at current or modestly increased levels. While we support legislation to lengthen the period of agreements and protection beyond ten years, we nonetheless support continued funding to help protect existing natural wetlands.

Marketing

We support the **WIC Farmers' Market Nutrition Program (FMNP)** which allows WIC participants to purchase fresh fruits and vegetables at local farmers' markets. We endorse full funding of $8 million for FY 94 for this innovative program with a proven track record of providing high quality, locally grown produce to low-income citizens while supporting small family farmers and the regional agricultural economy.

We also recommend that you provide sufficient funds to staff and administer the **national organic certification program.** While start-up and administrative funds would not be costly -- less than $1 million is required -- the potential benefit to farm income and consumer choice are enormous.

Farm Credit

We urge you to reject, as you have in recent years, the proposed decreases in Farmers Home Administration **direct farm ownership and operating loan funds**, and instead approve modest increases. The proposed 25% cut would have a devastating impact on the ability of lower-income farmers to get financing. It would also greatly limit the ability of FmHA to reach and assist beginning farmers and ranchers.

As you know, Congress last year passed landmark beginning farmer credit legislation for which rules are currently being written. It would be a cruel irony if Congress then turned around and withdrew a large percentage of the funds available to implement its new initiative. It is important to remember that the loan guarantee program has no beginning farmer down payment loan program and has no proven ability to reach lower-income and beginning farmers. It is also important to remember that in many years, a subsidized guarantee program will be more expensive (and always less closely supervised) than the direct program. Thus, not only would a transfer of funds be bad policy, but it also would be pound-foolish, even if currently appearing penny-wise.

In closing, let me urge you to find sufficient resources to fund the **Agricultural Science and Technology Review Board, the National Sustainable Agriculture Advisory Council, and the National Organic Standards Board**, all of which are authorized and in the early stages of their important work.

Thank you for this opportunity to testify. We look forward to continuing to work with you as this year's funding bill emerges.

AGRICULTURAL RESEARCH

WITNESS

HELENE CECIL, COALITION ON FUNDING AGRICULTURAL MISSIONS [COFARM]

Mr. DURBIN. I have ten minutes before the witching hour here and if Helene Cecil of the Coalition on Funding Agricultural Research Missions would like the opportunity to testify?

Ms. CECIL. Thank you. My name is Helene Cecil and I am representing the Coalition on Funding Agricultural Research Missions.

Now COFARM, which is a coalition of scientific and professional societies, represents over 100,000 scientists with interests in plant and animal agriculture in a variety of disciplines in both basic and applied research.

Federal funding of agricultural research programs has led to technological advances and to a better quality of life for all our citizens by providing an abundance of high quality food at an affordable price.

In addition, agricultural research has made agricultural products salable in foreign markets, thereby assisting in the balance of trade. If not for agricultural exports which total approximately $40 billion each year, our nation's trade deficit would be much greater.

Despite the recognized importance of the agriculture sector to the U.S. economy, funding for agricultural research and development in this country is declining. In 1988, the United States devoted only 1.9 percent of its total research and development funding to agriculture, forestry and fishery research programs, while Japan, Germany, France and the United Kingdom each spent over 5 percent.

To maintain or increase a favorable balance of trade in this area, the United States must strengthen its research base with increased support for the science and education budget of the USDA, including the Agricultural Research Service, Extension Service, Cooperative State Research Service, of which the National Research Initiative is a part.

Now COFARM is awaiting the release of the president's budget before making specific budget requests. At this time, though, we would like to make two specific comments.

And COFARM wholeheartedly supports the president's commitment to an increase in the NRI with a recommended minimum increase of $2 million this year and successive increases to at least a total of $188 million by 1997.

Second, COFARM supports awarding special research grants only when the institution or scientist selected to do the research has been competitively selected.

Our interest extends beyond the NRI and in these times of reduced federal spending we ask that the long-range benefits of continued funding of agricultural research in ARS, CSRS and ES not be overlooked. We ask that this committee give strong support for increased funding for fiscal 1994 funding of agricultural research to the extent possible and recognizing this funding as a high payoff investment.

Our written testimony outlines research needs in the areas of natural resources and the environment, plant systems, animal systems, nutrition, food quality and health, processing for value added and markets, trades and policy.

Thank you for your time today and we hope you will allow us to provide more input after the president's budget is released.

Mr. DURBIN. We would welcome that and I thank you for your testimony. I spoke to a group yesterday and said some of the same things that you have brought up today about the need for ag research and I hope you and people of like mind will rise to the defense of ag research. There are a lot of cheap shot artists out there, including some who ran in the last campaign from both political parties, who like to take ag research very lightly but who would be the first to complain if the price of orange juice went up.

So I hope that you will join us in that public relations effort as well.

Ms. CECIL. Thank you. I think at times we have not done a successful sell job on all the things that we have contributed.

Mr. DURBIN. Absolutely. And that is a responsibility we all share.

We are going to break here. If there is anyone on the list who cannot stay, please let the staff know. I will be back in about ten or 15 minutes.

[Recess.]

[The information follows:]

STATEMENT OF

COALITION ON FUNDING AGRICULTURAL RESEARCH MISSIONS

before the

HOUSE APPROPRIATIONS SUBCOMMITTEE

on the

FISCAL YEAR 1994 APPROPRIATIONS

Submitted by:

Helene C. Cecil, Ph.D.

TESTIMONY TO SUBCOMMITTEE ON AGRICULTURAL, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES, COMMITTEE ON APPROPRIATIONS FOR THE 1994 USDA BUDGET

My name is Helene Cecil and I am representing the Coalition On Funding Agricultural Missions (COFARM).

COFARM is a coalition of scientific and professional organizations that have joined forces for the sake of advancing agricultural research. COFARM represents the interests of the individual researchers in basic and applied agricultural sciences. Formed in 1990, its member organizations have more than 100,000 members. COFARM members are keenly interested in the policy-making process for funding agricultural research.

On behalf of the COFARM, I wish to submit for your consideration the following comments on the fiscal year (FY) 1994 agricultural research budget for the U. S. Department of Agriculture (USDA). My comments are directed at the Science and Education component of the USDA budget: (a) Agriculture Research Service (ARS), (b) Extension Service (ES), and (c) Cooperative State Research Service (CSRS) of which the National Research Initiative (NRI) is a part.

Agricultural research has contributed greatly to supplying us with a plentiful supply of nutritious food at a reasonable cost. In addition, agricultural research has contributed to new processing techniques and biotechnology that have made agricultural products saleable in foreign markets, thereby assisting in the balance of trade. If not for agricultural exports, which total approximately $ 40 billion each year, our nation's trade deficit would be much greater.

Agricultural research spans many areas: Included are:

Production studies on the plants and animals used for food and fiber;

Development of new products from these plants and animals;

Development of new uses of plants and animal byproducts, such as biofuels;

Developing methods to maximize the safety, quality and nutrition contribution of foods;

Human nutrition studies and providing nutritional information to the public;

Studies on conservation of natural resources and maintaining a stable environment (soil, water, and air);

Studies on ecological and biological diversity;

Monitoring global changes such as climate trends;

Developing practices to sustain rural communities; and

Improving foreign market acceptance of U.S. agricultural products.

Federal funding of agricultural research programs has led to technological advances and to a better quality of life for our citizens by providing an abundance of high-quality food at an affordable price. However, continued support of agricultural research is needed to maintain and improve our quality of life and also to maintain our competitiveness in the global market.

Some of the important agricultural research areas that need to be funded are:

Natural Resources and Environment

Interdisciplinary research is needed to learn:

How to measure environmental impacts on plant growth and fertility, and on ecosystem and animal development;

How to apply environmentally safe agriculture practices and systems, including biological and genetic alternatives to chemical treatments for pest control; and

How ecosystems function, so that we can maintain biological diversity and understand the effects of global climate change.

Plant Systems

Plant research goals include:

Developing varieties resistant to plant diseases and insects - problems that cost farmers millions of dollars each year. The success of this research will allow steady production levels in the face of changing pest problems, while protecting the environment; and

Developing plant varieties that can survive a broader range of environmental conditions, such as drought, temperature, air pollution, and soil salinity, so that production levels will remain stable from year to year.

Processing for Value Added

Research is needed to:

Address identified market needs and potential new applications; and

Identify and develop new processes that are environmentally feasible - for example, improved composting processes for conversion of agricultural wastes into marketable products.

Animal Systems

Animal System research goals include:

Creating more healthful meats by changing the body composition of food animals to contain more protein and less fat: using food technology to design

lower-fat food products;

Improving animal well-being and health by identifying physiological and productivity indicators of health, developing health management systems, reducing animal stress and disease, and maintaining and improving cost-efficient animal production on farms or in ponds; and

Reducing production of animal wastes, by (a) reducing their production via nutritional or physiological systems and (b) increasing their utilization, for example through improved composting technology.

Nutrition, Food Quality, and Health

Future research is needed to:

Improve diagnostic methods for detection of disease-causing microorganisms in foods, and for on-the-farm detection of residues of pesticides, drugs, and other chemicals used in production;

Provide information about naturally occurring food substances that may have important roles in maintaining health; and

Maximize the safety, quality, and nutritional contribution of foods from animals.

Markets, Trade, and Policy

Research is needed to:

Develop practices and policies to sustain the rural community's infrastructures and to improve the use of existing resources and new technologies;

Remove impediments to international trade, to improve foreign-market acceptance of U.S. agricultural products; and

Understand consumer needs and develop methods for consumer education concerning food choices and dietary patterns.

Despite the recognized importance of the agriculture sector to the U. S. Economy, funding for agricultural research and development in this country is declining. In 1988, the United States devoted only 1.9% of its total research & development funding to agriculture, forestry, and fishery research programs, while Japan spent 6.5%, Germany 3.1%, France 4.6%, and the United Kingdom 5.5%. To maintain or increase a favorable balance of trade in this area the United States must strengthen its research base. Central to this effort is increased support for the Science and Education budget of the USDA, including the Agriculture Research Service (ARS), the Extension Service (ES), and the Cooperative State Research Service (CSRS) of which

67-181 O—93——7

the National Research Initiative (NRI) is a part.

COFARM is awaiting the release of the President's budget before making specific budget requests. But we would like to make two specific comments:

> COFARM wholeheartly supports the President's commitment to an increase in the NRI, with a recommended minimum increase of $2 million this year and successive increases to at least a total of $188 million by 1997.
>
> COFARM supports awarding special research grants only when the institution/scientist selected to do the research have been competitively selected. There are annual emerging needs in all areas of agriculture which require special grants to focus on a problem requiring research to solve. An example is the recent upsurge of tuberculosis in cattle and related species.

In these times of reduced federal spending, we ask that the long range benefits of continued funding of agricultural research not be overlooked. We ask that this committee give strong support for increased funding for Fiscal 1994 funding of agricultural research to the extent possible as a high pay-off investment.

Thank you for your time today and we hope you will allow us to provide more input after the President's budget is released.

AGRICULTURAL RESEARCH

WITNESS

BENJAMIN C. BOLUSKY, AMERICAN ASSOCIATION OF NURSERYMEN

Mr. DURBIN. I'd like to invite Mr. Benjamin Bolusky, American Association of Nurserymen.

Mr. BOLUSKY. Thank you, Mr. Chairman.

Mr. DURBIN. Well, thank you for your patience, too. We will make your statement part of the record and please proceed.

Mr. BOLUSKY. I appreciate that and will be happy to summarize, given the late hour.

I am Ben Bolusky, Director of Government Affairs for the American Association of Nurserymen.

According to USDA, nursery and greenhouse crops totalled $8.4 billion in grower cash receipts in 1991 or 10.4 percent of the total receipts for all U.S. farm crops. Nursery and greenhouse crops now rank number six in grower cash receipts among all farm commodities, ahead of such major crops as wheat, cotton and tobacco.

Nursery and greenhouse crop production now ranks as one of the top five agricultural commodities in 23 states and it ranks as number six in the state of Illinois. Nursery and greenhouse farms in 1990 had the highest average net farm income of any agricultural commodity group, actually four times higher than the average American net farm income.

These what we would like to think are impressive industry figures become even more so when one considers that unlike so many other agricultural sectors the nursery industry does not receive nor does it want any federal subsidies or price supports. And despite being the sixth ranked agricultural commodity in the nation, the nursery industry received only two-hundredths of one percent of all federal agricultural research in 1991.

U.S.D.A.'s Economic Research Service provided the statistics cited a moment ago. The nursery industry relies heavily on this ERS data. It is this nation's single source of such nursery industry statistics. These comprehensive analyses are simply not available elsewhere. The nursery industry now is so large and so diverse our economic information base is that much more critical today. But the industry cannot produce this data alone. We need the continuing partnership of USDA's Economic Research Service. And therefore, Mr. Chairman, ANN respectfully requests Congress to appropriate $95,000 in fiscal year 1994 to USDA's economic research service and mandate that ERS continue providing these critical economic analyses of the nursery industry.

The American public is demanding more and more plants and trees to help clean and cool the air, stem runoff and soil erosion, improve water quality and conservation. And in response to the public's growing environmental awareness, the nursery industry is conducting research in a variety of areas including pest management, reduction of chemical usage, searches for non-chemical alternatives, reduction in water use and improvement of water quality.

Yet our industry's ability is limited to conduct all of this necessary research alone, even as our nation's environmental needs increase. Up to 90 percent of all nursery crops produced in the north-

west are shipped out of the region to other states and this is much higher than the 50 percent of the national average.

The nursery industry respectfully requests Congress to provide $1.5 million to USDA's Agricultural Research Service for the establishment of a Northwest Nursery Crops Research Center. Not one penny of these fund would be for brick or mortar. The facilities already exist. All of the requested funds would be for research personnel and program support.

This is a regional project that enjoys the unified support of not only the American, Oregon, Washington and Idaho Nursery Associations but also has the enthusiastic endorsements of Oregon State University, Washington State University, the University of Idaho and the extension services of these three northwest states.

We are genuinely appreciative of the strong supporting language which both this committee and its counterpart in the Senate included in their respective committee reports for fiscal year 1993 for this project. We are hopeful that Congress will see the investment in appropriating adequate funding to get the Northwest Nursery Crops Research Center underway in fiscal year 1994.

The nursery industry we like to think does not ask for much. What we do we do on our own without impinging on the limited resources of the Federal Government. I would venture to say that if Congress even fully funds both the ERS and ARS projects which I have talked about here this afternoon the percentage of federal research going to the nursery industry, the nation's number six ranked agricultural commodity, will not change from its current level of two-hundredths of one percent.

Mr. Chairman, since the fiscal year 1994 budget is not yet available, ANN respectfully requests the opportunity to submit supplemental recommendations for the record to this committee on other USDA research programs and we appreciate the opportunity very much.

Mr. DURBIN. We would welcome that.

Are you familiar with members of your association who use the Crop Insurance Program?

Mr. BOLUSKY. The Crop Insurance Program is relatively limited within the nursery industry for a couple of reasons.

One, most of the crops, most of the nursery crops for a variety of reasons are not eligible, particularly those that are grown in the ground. The only ones that are eligible are those that are grown in containers but a vast majority of the species or the plant cultivors up to this point have not been eligible for federal crop insurance.

Mr. DURBIN. Well, we got a report from the crop insurance people about the loss by state and the ratio of loss to premium paid since 1980 and when I went through it the category of nursery crops stood out because of the terrible losses. And I note, with approval, of course, your comments that you do not come to us with price supports and the like but in the state of Florida, over a several year period of time, about $1.2 million in premiums paid, $7.8 million paid out. In my state of Illinois, $57,000 in premiums paid, $472,000 in losses incurred. That is not the worst, I am afraid. The worst is Texas. For $70,000 in premiums, we paid out $2.6 million in losses under the crop insurance program. In Oklahoma, $690 in premiums, $11,000 paid out in losses.

It is one of the worst programs overall in terms of crop loss ratio and I would concede your points about not coming to the trough too often but in this case, I would have to say that it is very difficult to justify crop insurance being extended to nursery crops.

Mr. BOLUSKY. One of the problems, Mr. Chairman, with the crop insurance system as it exists, the value, and one of the reasons why I would suggest that the figures there appear to be so out of whack, is that the value of nursery crops vis-a-vis the whole host of other agricultural commodities is vastly higher, as is reflected in the net farm income for the nursery industry. The value of a two-inch caliper sugar maple is a lot higher than a few ears of corn by comparison. And I would suggest that that is one of the reasons that those figures appear to be so out of whack.

Mr. DURBIN. That would also support arguments for raising the premium.

Mr. BOLUSKY. I was just going to say that if those figures suggest such a discrepancy, one of the antidotes would be to raise the premium for the nursery industry appropriately. Because the value of the crops are so high, because the net farm income is comparatively higher, four times higher than the rest of American agriculture, there would appear to be great merit to do so.

It has not been a program that has been widely used by the industry.

Mr. DURBIN. No, it is not. In Texas, we would have to raise the premiums 3800 percent, in Oklahoma, 1600 percent. In my state of Illinois, 800 percent, and in Florida, 600 percent to break even. So I do not want to lay that on your shoulders other than to tell you we are taking a close look at crop insurance and this one stood out as we went through it and I wanted to bring that up with you, to tell you that we think there are going to be some changes there. For the few states that use them, we are going to make some real changes.

And now to the surprise of everyone, I have a roll call vote and I will return.

[Recess.]

[The information follows:]

AMERICAN ASSOCIATION OF NURSERYMEN

1250 I STREET, N.W. / SUITE 500 / WASHINGTON, D.C. 20005 / 202/789-2900

Statement of the
American Association of Nurserymen
before the
Subcommittee on
Agriculture, Rural Development, Food and Drug Administration
and Related Agencies
Committee on Appropriations
United States House of Representatives
March 24, 1993

Mr. Chairman, the American Association of Nurserymen (AAN) welcomes this opportunity to present the nursery industry's views regarding the Fiscal Year 1994 budget for the U.S. Department of Agriculture (USDA).

AAN is the national trade asssociation of the nursery industry. AAN directly represents 2,500 nursery growers, landscape professionals and garden center retailers. We represent an additional 16,000 family farms and small businesses through the membership of state and regional nursery/landscape associations.

ECONOMIC STATURE OF NURSERY INDUSTRY

According to USDA's Economic Research Service (ERS), the nursery and greenhouse industry is the fastest growing agricultural sector in cash receipts with an average growth rate of 9 percent per year since 1982. Over the past decade, the value of grower cash receipts and retail sales of nursery and greenhouse products has expanded twice as fast as the gross national product. Nursery and greenhouse crops totaled $8.4 billion in grower cash receipts in 1991 -- representing 10.4 percent of the total cash receipts for all U.S. farm crops.

Nursery and greenhouse crops in 1991 ranked 6th in total grower cash receipts among all farm commodities -- ahead of such major crops as wheat, cotton and tobacco. Nursery and greenhouse crop production ranks in the top five agricultural commodities in 23 states and in the top 10 in 42 states. USDA also finds that nursery and greenhouse farms in 1990 had the highest average net farm income of any agricultural commodity group at $53,589. This is four times higher than the average American net farm income of $13,458.

These impressive industry figures become even more so when one considers that unlike so many other agricultural sectors, the nursery industry does not receive -- nor does it want -- any federal subsidies or price supports. In fact, USDA data shows that despite being the 6th-ranked agricultural commodity in the nation, the nursery industry received only twelve-hundredths of one percent of all direct government farm payments. This is the least of any farm commodity group and the bulk of this was for

commodities other than nursery crops.

Despite being the 6th-ranked agricultural commodity in the nation, the nursery industry received only two-hundredths of one percent of all federal agricultural research according to USDA's Agricultural Research Service. Particularly since the nursery industry does not receive subsidies, AAN believes the federal government's contribution to research is proper and critical to the nursery industry.

ERS -- CONTINUATION OF ECONOMIC ANALYSES OF NURSERY INDUSTRY

USDA's Economic Research Service (ERS) provides agricultural economic information addressing the concerns and decision-making needs of farmers, consumers, extension workers, and government officials. For example, ERS provided the farmer cash receipts statistics above. The nursery industry relies heavily upon this ERS data -- it is this nation's single source of such vital nursery industry statistics. These comprehensive data analyses are simply not available elsewhere. It is absolutely critical for the nursery industry for ERS to continue such analyses.

AAN respectfully requests Congress to appropriate $95,000 in FY94 to USDA's Economic Research Service specifically to continue providing these critical economic analyses of the nursery industry.

ARS -- NORTHWEST NURSERY CROPS RESEARCH CENTER

The American public is demanding more and more plants and trees to help clean and cool the air, stem run-off and soil erosion, and improve water quality and conservation. As a direct result, the nursery industry is playing significant and ever-increasing environmental and research roles. National studies have shown that properly planted trees in residential and commercial landscapes have not only helped to lower air pollution, but have substantially reduced this nation's annual energy costs by $2 billion.

Simultaneously, and in response to the public's growing environmental awareness, the nursery industry has placed demands upon itself in the areas of pest management, reduction of chemical usage, searches for non-chemical alternatives, reduction in water quantities, and improvement of water quality. Yet, the nursery industry's ability is limited to conduct all of this necessary research even as our nation's environmental needs increase.

Up to 90 percent of all nursery crops produced in the Northwest

are shipped out of the region to other states. This is much higher than the 50 percent national average. By law, these shipments must be essentially free of injurious pests. Many nursery crops shipments involve entire plants with soil intact. As a result, they must be inspected and then shipped in compliance with federal and state pest quarantine regulations and phytosanitary certifications.

AAN respectfully requests Congress to provide $1.5 million to USDA's Agricultural Research Service for the establishment of a Northwest Nursery Crops Research Center. Not one penny of the requested funds is for brick or mortar -- the facilities already exist. All of requested funds is for research personnel and program support.

While proposed to be conducted in the states of Oregon, Idaho and Washington, the research will provide broad benefits to nursery farmers, landscape professionals, garden centers and consumers across the entire nation. Undoubtedly, many of the anticipated benefits from the proposed research center will go beyond the nursery industry and be applicable to other agricultural sectors.

The Northwest Nursery Crops Research Center enjoys the unified total support of not only the American, Oregon, Washington and Idaho nursery associations, but also the enthusiastic endorsements of Oregon State University, Washington State University, the University of Idaho, as well as the Extension Services of those three northwest states.

AAN is genuinely appreciative of the strong supporting language which both the House and Senate Appropriations Committees included in their respective committee reports for FY93. We are hopeful that Congress will see the investment in appropriating adequate funding to get the Northwest Nursery Crops Research Center underway in FY94.

CONCLUSION

Mr. Chairman, since the FY94 Budget is not yet available, AAN respectfully requests the opportunity to submit additional testimony for the record to this Committee on other important USDA research programs.

As in past years, Mr. Chairman, AAN truly appreciates this opportunity to present the nursery industry's views regarding agricultural research and USDA's annual budget. Thank you for your consideration and we stand ready to work with you and your staff.

AGRICULTURAL RESEARCH

WITNESS

RUDY J. WODZINSKI, AMERICAN SOCIETY FOR MICROBIOLOGY

Mr. DURBIN. Dr. Rudy Wodzinski, American Society for Microbiology. Thanks for waiting.

Mr. WODZINSKI. My name is Rudy Wodzinski and I am a professor of molecular biology and microbiology at the University of Central Florida. I am here today in my capacity as chairman of the Agricultural Food and Industrial Microbiology Committee of the American Society for Microbiology.

The ASM has, I think, for the last six years submitted comments on the budget. We would like again to submit this year more specific ones later on when we know more what is happening but I would like to deviate from the test here and just tell you a few things that we think are very important.

Our society attempts to furnish information to Congress. We comment on bills, we comment on regulations. We have offered our services, for example, in this latest outbreak of E. coli and we are very concerned about food safety.

Our members are in all parts of agriculture, with the USDA itself, we are within FDA, within the universities. We have over 40,000 members. We are the largest single biological sciences society, professional society.

My comments that I really want to direct are a lot to the National Research Initiative and I would like to call your attention at the graph at the end, I do not know if you saw this, because I think it is rather interesting. The original CRCO, Competitive Research Grants, were started in 1978 and at that time Congress authorized $40 million and I think 14.5 were appropriated. Then there was another initiative in 1985 for biotechnology. Both of these were justified as being very necessary programs. And then, of course, the NRI and the Farm Bill of 1990 and then appropriated in 1991.

What is interesting about this graph is that if you put it in 1978 dollars using the deflator index from OMB, we have never reached the $40 million mark that Congress originally authorized in 1978.

So in looking at it, it seems that agriculture never gets the funding for the fundamental programs as compared to other agencies. It has been very, very difficult.

Yet when we look at the type of research that is done, it is very, very complex. We have many more systems, we have all the different kinds of plants, different types of animals, microorganisms that are involved, the viruses. In some ways, they're simpler than a health system but we do not get the funding for it. So it has kind of retarded the progress even in biotechnology.

This program has helped a lot to give some of the fundamental basic work needed to capitalize on biotechnology but it lags far behind the other systems. If it were appropriated at a higher level, many of us feel that there would be many more products that would come out, many more with value added, we could really take much more advantage of many of the programs within biotechnology.

So I went really a long way away from the printed statement because I know that people usually read these ahead of time and you are aware of what is happening, but I wanted to kind of lay it out as to what some of the problem is and where we stand. These problems—even genetically, there is more DNA in the corn cell than are in the human cell. It makes it much more difficult. We could do a lot more if there were a lot better appropriation.

So with saying that, what we would really hope for when there are no figures now is if this committee would endorse the NRI. We think that is a very important program. And perhaps even look farther to the future as to how it is going to be funded. When it originally started in the Farm Bill of 1990, it was recommended at $150 million and then $50 million increases. If that had followed through, we would be at the $300 million level now instead of $97.5 million. So we are lagging far behind. I am trying to make the case for that and I hope that I have.

I would also like to comment on a couple of other areas that have to do with the higher education grants. We recommend that the higher education grants be funded appropriately. There have been several studies that indicate that there is going to be a shortage of agricultural scientists and a positive program has to be maintained to meet those needs.

I would like to especially talk a little bit, too, about the Agricultural Research Service, about ARS. Last year's funding in effect meant that they lost quite a few people because of attrition. There was not enough to take care of the mandated pay raises so anybody lost in effect they did not replace. And yet ARS is very important in this whole picture, especially when we look at much of the biotechnology. We can almost liken that to a development type setup where in a university you have much of the basic work that goes on and then it has to be developed to a point where it can be commercialized or used by a farmer in the field. ARS is a very, very important link in there.

And I know that there is a feeling among some of the people when I talk to them in ARS that if money is given to NRI, it is pulled away from ARS. They want us to be very careful about that. I think that they might be justified, so I try to make the case that by helping one you may hurt another. It really should be new monies when you talk about this because the percentage of money that goes into agricultural research is not very high as compared to the other areas and the problems are there and they can be solved.

To get philosophical in another way, I know it is also—we have all these surpluses, so who cares? Well, we have a lot of cars that are not be sold either, right? You could call them surplus, too. Some way or another you do try to market them.

With agriculture, we can try to make different products with it. We can capitalize on that and have a real investment of it that will pay off. In the past, the research has always paid off.

And the last comment I would like to make is on the animal welfare. It is important that that program be funded because it is really necessary that the public's concern on animal welfare be allayed. It helps the scientists if we are inspected more often. We have nothing to hide. I think if people knew what was going on in those laboratories that are inspected, sometimes we see some of

those figures, it might be a chip of paint on the wall and they say it is in violation. When you look at the real abuse, it is very low but we still need the inspection. I think it is very, very important to us that that be done. Most scientists know that if you mistreat an animal the research data is not any good anyway.

If you take the other tact, does some abuse occur, the question is there is some child abuse, too, is there not? Things can happen. But every institution I have ever been with tries very hard to treat those animals—and, in fact, in our area, they have it a lot better than migrant workers as far as the conditions they have. It is a matter of priority. But I think it is important that that be funded.

So in summary, I really wish you would look at the NRI very closely and ARS and higher education and the APHIS grants and once the president's budget is published, we would like to make some very specific recommendations.

And one last comment is we do support COFARM and their objectives. That coalition of 13 societies has gotten together to come up with consensus as to what is needed in research and I think that is important.

Mr. DURBIN. Thank you, Dr. Wodzinski. I liked your testimony. I'm glad you put some perspective on some issues like animal welfare that will be valuable for us in the subcommittee and I appreciate your patience in waiting to testify.

Thank you very much.

Mr. WODZINSKI. Thank you.

[The information follows:]

STATEMENT

OF THE

AMERICAN SOCIETY FOR MICROBIOLOGY

Presented by

Rudy J. Wodzinski, Ph.D.,
Chairman, Committee on Agriculture, Food and
Industrial Microbiology of the
Public and Scientific Affairs Board of the
American Society for Microbiology and
Professor of Molecular Biology and Microbiology,
University of Central Florida, Orlando, Florida

before the

House Subcommittee on Rural Development, Agriculture,
and Related Agencies of the
House Appropriations Committee

Public Witness Hearing on the
FY 1994 U.S. Department of Agriculture

March 24, 1993

Mr. Chairman and Members of the Subcommittee:

My name is Rudy J. Wodzinski and I am a Professor of Molecular Biology and Microbiology at the University of Central Florida. I am here today in my capacity as Chairman of the Committee on Agricultural, Food and Industrial Microbiology of the American Society for Microbiology (ASM). The American Society for Microbiology (ASM) wishes to submit for your consideration, and the record, the following comments on the fiscal year (FY) 1994 Budget for the United States Department of Agriculture (USDA). The ASM, a scientific, professional organization, is the single largest biological sciences organization in the world, with an active membership of over 40,000. Many of these individuals are actively engaged in activities in / or directly related to agriculture. Most of our members are bench scientists employed in academe, research institutions, government and industry.

The research activities of our members have contributed to the generation and/or more efficient production of agricultural products via biotechnology and classical techniques that enhance the quality of life and prolong the lives of all citizens. In addition, our members are very concerned with the safety of agricultural products and have offered our assistance to the USDA regarding the microbiological safety of foods in lieu of the recent E coli outbreak on the West Coast. Our comments are targeted to bring to your attention the resources that are required by the USDA in FY 1994 that will permit them to accomplish their mission and enable them to fulfill the mandates of Congress. Our comments are directed to specific areas of the USDA budget: a) the National Research Initiative (NRI), Higher Education Grants, the Agricultural Research Service (ARS), and the Animal Care program within the Animal Plant Health Inspection Service (APHIS).

In the past, the American Society for Microbiology has made very specific budgetary recommendations and comments on the administration's budget. Today, we are not able to be as specific because the Administration's budget is not available. We plan to submit specific comments to your Committee in writing when budgetary data becomes available. We ask that the Committee review those comments with the same consideration afforded to us today. Additionally, we offer the technical expertise of our members to the Committee and will respond promptly to any questions.

Our society strongly supports the aims of the Coalition on Funding Agricultural Research Missions (CoFarm). We actively participate with other professional societies in formulating research directions and needs for agricultural research. We endorse the recommendations of CoFARM.

Mr. Chairman I would be remiss if in considering the present economic climate that I did not take this opportunity to point out several important historical aspects of agricultural research that relate directly to the National Research Initiative (NRI).

Past Funding Practices for Competitive Fundamental Research Programs

Fundamental agricultural research has been severely under funded for the past 30 years. In 1978, the forerunner of the NRI, the Competitive Research Grants Office (CRGO), was founded and first authorized by Congress at $40 million. $14.4 million was appropriated that year. The Biotechnology initiative was adopted in 1985 and the National Research initiative was adopted in 1991. Although nominal increases in funding were appropriated for the new programs, the level of funding for these fundamental programs in the CRGO or NRI has never reached the level of funding first authorized at $40 million (when adjusted to 1978 constant dollars utilizing OMB GNP deflators) (Figure 1).

The NRI is an important necessary program which provides the basic information that is absolutely essential if the United States is to maintain its preeminent position as the world leader in agriculture. Jobs related to agriculture can be preserved only if the United States maintains its position as an efficient, environmentally sound, producer and exporter of safe, nutritious food. The NRI has integrated prior research programs with six new additional program areas recommended by the National Research Council's (NRC) Board of Agriculture (BOA) in "Investing in Research: A Proposal to Strengthen the Agricultural, Food and Environment system". The NRI is a program that was generated by agricultural scientists and strongly endorsed by Congress in the 1990 Farm Bill when $500 million was authorized for the program.

When the NRI was authorized in the FY 1990 Farm Bill, it was generally recognized that the six new research areas recommended by the NRC-BOA could only be accomplished in a timely fashion when the program was fully funded at the authorized level of $500 million. The program was recommended to start at $150 million in FY 1991 and increased at the rate of $50 million per year providing that the need and potential of the program was still evident. If that schedule had been followed, the appropriation for FY 1994 would be $300 million. The need and the potential of the program are more relevant today than when it was instituted in 1990. The NRI has stimulated scientists to propose new and novel approaches to solving problems in agriculture.

GOALS OF AGRICULTURAL RESEARCH

Strengthen the agricultural, food and environmental system to meet the challenges that confront US. agriculture on a global scale.

Provide the fundamental research needed to overcome technical barriers and use the latest advances in science to benefit the U. S. food and agricultural system.

AIMS OF AGRICULTURAL RESEARCH

Ensure strong economic performance from agriculture.
Provide the technology base that is necessary for the development of new products, new processes and value added products derived from agricultural materials.

Improve and design food products which are highly nutritious and of high consumer quality to provide enhanced well-being in our citizens.
Ensure safety of foods.
Understand and develop macro-economic policies which permit US. agriculture to remain competitive in world markets.
Provide for the human resources and infrastructure for agricultural research.
Sustain and enhance the natural resources by developing new scientific and management technology for food and agricultural production.
Advance the fundamental knowledge of plant and animal systems to provide the technological base to supply broad program areas.

Even a cursory examination of the goals and aims of the program indicates that the NRI is truly an investment in the future of American agriculture which will continue to provide relatively cheap food that is safe, nutritious, and competitive in global markets.

In both FY 1992 and FY 1993, $97.5 million was appropriated for the program. It is our understanding that the President has the NRI as part of his "Vision for Change" package and that an increase of $2 million is recommended for the budget for the NRI for FY 1994 with subsequent incremental increases to a total of $188 million by 1997. We ask that the Committee consider the potential and needs of the NRI. Last year, Dr. Paul Stumpf, chief scientist at CRGO and NRI from 1988 to 1991, cited the weaknesses in the NRI program in "Agricultural Research Grant System Needs Nurturing" (ASM News 58:3 p.122-123).

> "Unfortunately, the program also has its weaknesses. As noted, the success rate is low. On the basis of my perception of the quality of proposals reviewed, a 35% success rate would be more realistic. Under funding of successful proposals is a chronic problem.....
>
> One noteworthy persistent problem is the expansion and initiation of new programs without a concomitant increase in appropriations. This problem is generated when various groups advocate the allocation of existing funds to their special interest areas. The overall result is the same low level of funding, and the same period of funding year after year..."....

We ask that the Committee fully embrace not only the aims and goals of the NRI but also its funding at a level commensurate with its importance and potential.

Higher Education: We recommend that higher Education Grants be funded appropriately. Several studies have predicted a shortage of Agricultural scientists. A positive program must be maintained to meet these needs. Also, there is a severe shortage of funds to train minority students in agriculture.

Agricultural Research Service: We recommend that ARS be funded at a level higher than the $661 million budget in FY 1993. The FY 1993 level of funding was not adequate for the needs of ARS. That level of funding did not provide for mandated pay raises, consequently causing scientists and technical support to leave government service. A strong ARS component is absolutely necessary if agriculture is to prosper in the US. In addition to their pioneering studies and mission to develop new knowledge essential to solving technical agricultural problems that are broad in scope and have high national priority, the ARS also serves as the essential development link required to reduce laboratory observations on agricultural problems to practice. There are many developmental problems that industry will not solve because of minimal or uncertain profit potential. There are problems that are prevalent in agriculture that can be likened to orphan drugs in medicine where relatively few individuals are affected, yet the problem is critical and requires solving.

We hope that this committee will continue to provide the funds that are needed to upgrade ARS facilities. We are aware that this committee has supported the upgrading of ARS facilities in the past and we encourage you to continue this necessary effort.

APHIS Animal Welfare: We recommend that the animal care program within APHIS be adequately funded. APHIS must carry out its mandate dictated by law. Additionally, it is necessary that APHIS verify and conduct adequate and timely inspections of research facilities to allay public concern.

SUMMARY:

The American Society for Microbiology recommends the following:

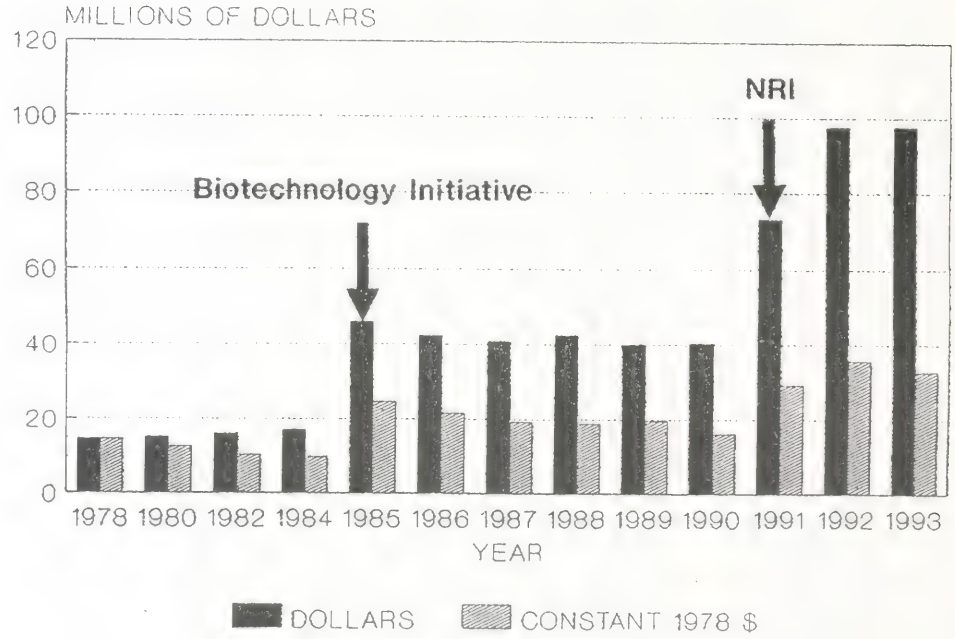
We ask that the Committee fully embrace not only the aims and goals of the NRI but also its funding at a level commensurate with its importance and potential.

We recommend that higher Education Grants be funded appropriately.

ARS be funded at a level higher than the $661 million budget in FY 1993. We ask that the committee continue to provide the funds that are needed to upgrade ARS facilities.

We recommend that the animal care program within APHIS be adequately funded.

CRGO AND NRI FUNDING HISTORY



ADJUSTED WITH OMB GNP DEFLATORS

NUTRITION RESEARCH

WITNESS

BUFORD L. NICHOLS, AMERICAN INSTITUTE OF NUTRITION

Mr. DURBIN. Dr. Buford Nichols, American Institute of Nutrition. Our appreciation to you, too, for your patience.

Dr. NICHOLS. We are glad to see you again.

I am speaking for the American Institute of Nutrition and addressing issues raised by our sister society, the American Society for Clinical Nutrition, and our testimony has been endorsed by the American Dietetic Association and the Society for Nutrition Education.

I was really very interested in Dr. Wodzinski's comments because they are pretty much along the same line as the Nutrition Society's perspective. We are all very excited about the potential for contributing to prevention of disease through nutrition.

You know that last year the Surgeon General calculated that of the ten major diseases five contribute 71 percent of the total deaths in this country, five of those are prevented through diet.

We are hopeful that nutrition can be incorporated into the prevention of diseases in this country and we hope that the approach will be through food. We think that if there is a word sustainability, that sustainable nutrition is that nutrition that is available to people through the food chain and this is true for all ages.

The focus on nutrition and health is wrapped up in something called the "Nutrition and Your Health: Dietary Guidelines for Americans," a banner for the applied programs of our country. We feel that there needs to be additional research concerning the biological bases for the national dietary guidelines. We think that there are additional research needs concerning behavioral aspects and concerning educational aspects utilizing these recommendations.

And so in the context of that priority, we are suggesting that your committee try to increase funding for the NRI aspects on nutrition through the CSRS and, again, to try to increase the funding to five ARS human nutrition centers so that we can address the biological foundations for the national dietary guidelines and improve the quality of our nutrition education materials.

Mr. DURBIN. Are you familiar with the Human Nutrition Information Service?

Dr. NICHOLS. Yes, sir.

Mr. DURBIN. Can you tell me your opinion? I notice that you are testifying on behalf of several agencies that have been fairly critical of their work in the past.

Can you tell me your opinion of the work that they are doing, whether it has scientific value?

Dr. NICHOLS. I know of the criticism and you are aware of it, too. I think they are turning it around. I think it is a cheap shot to take an underfunded agency and accuse it of not doing their job. I think it is a Catch-22. I do feel that they could have done better under their previous contracts. I do feel that they can rejuvenate and improve their contracting practices.

I do feel that their work needs to be expanded. For instance, it is very important that we have a national sample concerning what people eat in this country but as we move towards trying to implement preventive health through the improved nutrition practices, and this is true for applied programs of the government as well as the public at large, we do need to start focusing on some high priority, at-risk groups. There probably needs to be an over sampling of the aged population, over sampling of the pregnant population, over sampling of the pre-school child. Because in a national survey, these populations are so diluted that you really cannot make a statement about dietary practices.

Mr. DURBIN. Is their work unique?

Dr. NICHOLS. Yes. The work done by HANES is, of course, to a degree parallel but HANES is—there is a fundamental division here between HANES and HNIS. It is a division that divides all the field of nutrition. There are some people who say that nutrition has a lot to do with food and AIN feels that way and I feel that way about it and I think this committee feels that way. But there are other people who say that nutrition has nothing to do with food and it is basically from that perspective that HANES is proceeding down its track. They are trying to diagnose anemia by looking at hemoglobin but without evaluating the quality of the diet.

Mr. DURBIN. Do you have an opinion as to whether it is reasonable to pay $14 million or $15 million for 15,000 persons surveyed in the human nutrition information survey?

Dr. NICHOLS. I am afraid I am not qualified to answer that question. Research is expensive.

Mr. DURBIN. That's $1,000 a person. It sounds very expensive.

Dr. NICHOLS. It depends on the quality of the data. I think if they got poor quality data, it is all very clear that the risk benefit or the cost benefit is not good.

Mr. DURBIN. Thank you, sir.

Dr. NICHOLS. Thank you.

Mr. DURBIN. We appreciate your testimony.

[The information follows:]

Testimony of

Dr. Buford L. Nichols,

Director, Children Nutrition Research Center,

at the Baylor College of Medicine,

representing

the American Institute of Nutrition

before the

U.S. House

Agriculture, Rural Development and Related Agencies

Appropriations Subcommittee

March 24, 1993

This testimony has been endorsed by the
American Dietetic Association
and the
Society for Nutrition Education.

I am Dr. Buford Nichols, Director of the Children's Nutrition Research Center at the Baylor College of Medicine in Houston, Texas. I thank the committee for its support of nutrition research and for the opportunity to speak on that subject today.

I am testifying on behalf of the American Institute of Nutrition (AIN) and the American Society for Clinical Nutrition (ASCN). These organizations consists of about 3,000 nutrition researchers from nearly every major research, education and clinical institution in the United States. This testimony has been endorsed by the American Dietetic Association (ADA) and the Society for Nutrition Education (SNE).

Nutrition research sponsored by the Department of Agriculture consists of investigations of interactions of foods with the genetic potential of consumers. By understanding the mechanisms of food-genome interactions, the government is better able to provide critical information for continued improvement of human diets. The research must also incorporate the broad scope of age and risk factor distributions in the U.S. population.

Dietary guidelines for the American public are carried forth in publications like "Nutrition and Your Health: Dietary Guidelines for Americans" published by the USDA and the Department of Health and Human Services (HHS). These guidelines are based on a thorough evaluation of current scientific evidence which links food intake and the risk of developing several diseases. There is an urgent need for comprehensive research into the biological basis of the Dietary Guidelines. This would lead to future refinements of the Guidelines that will improve dietary practices and health maintenance, and reduce the incidence of obesity, diabetes, hypertension, heart disease, cancer, and a host of other health-related problems. It is within this context that the American Institute of Nutrition makes specific appropriation recommendations.

Cooperative State Research Service (CSRS):

The AIN and ASCN request that the Committee provide $25 million for Nutrition, Food Quality and Health research under the National Research Initiative (NRI) at the USDA Cooperative State Research Service (CSRS). This request is consistent with the NRI authorization in the 1990 Farm Bill.

In his plan *A Vision of Change for America*, President Clinton recognizes the benefits of investing in agricultural research and calls for $188 million in increases in the NRI over the next four years. Though the proposed increases are modest for FY 1994, AIN and ASCN support the President's commitment to the NRI.

The NRI supports vital research through the competitive peer-review process which is designed to fill existing gaps in our knowledge. Peer-review is considered to be the most effective

selection process because proposals are rated by other scientists who can objectively evaluate the nature of the research and the contribution its results will make to the existing base of knowledge and human welfare.

Although it is important that all six areas of the NRI get adequate funding, we are particularly concerned about the small number of individual grants in the Nutrition, Food Quality and Health sector.

In FY 1992, the NRI was able to fund little more than one out of every four (51 of 185) nutrition and food safety grant applications received, and funding of individual grants was for only about half the amounts requested. This success rate and level of funding is among the most competitive of any national government research funding agency. Only a few of the best proposals are funded, while many good proposals are not.

In 1992, NRI-supported research on human nutrition included studies on:

- Dietary Fiber in Blood Pressure Regulation
- Calcium Requirements for Adolescent Females
- Manganese requirement in Elderly Women
- The Vitamin K Status of the Breast-feeding Infant Beyond the Newborn Period.

While these and other studies add to the base of knowledge on human nutrition, many of the questions go unanswered because the $6.5 million provided in FY 1992 and FY 1993 were woefully inadequate. The AIN and ASCN recommended level of $25 million for FY 1994 would provide the needed support better access to new nutritional knowledge.

Agriculture Research Service (ARS):

The ARS Human Nutrition Centers are the primary federal programs for issues related to normal nutrition and should be funded at the administration's recommended levels. The ARS also provides funding for the food animal gene mapping program. **We encourage the committee to increase the funding by $25 million.**

Other USDA Programs:

We recognized the importance of putting the fruits of research into practice and support the administration's efforts to increase the effectiveness of nutrition education through other USDA programs. The Administration has proposed increased funding for several nutrition related programs such as the **Women, Infants and Children (WIC)** program which includes a Nutrition Education Component. This program is important to the effort to provide the public with sound nutritional guidance.

AIN and ASCN would also like to endorse the efforts of the

Coalition on Funding Agriculture Research Missions (CoFARM), a coalition of science and professional societies that supports all agricultural research. The AIN and ASCN urge the committee to support strong funding for research on natural resources, plant and animal systems, and value-added processing. The links between nutrition research and other agriculture areas need to be supported in order continue to provide the country with a safe, affordable, nutritious food supply.

Conclusion:

An estimated 23 percent of the U.S. gross national product is from food and agriculture activities, but less than $500 million is spent on nutrition research annually. AIN and ASCN propose increases in the number and size of CSRS competitive nutrition research grants and continued support for ARS nutrition research centers in order to bring modern biological science to bear on problems of human nutrition.

The biological foundation for dietary guidelines must be established before food and agricultural policies can be adequately formulated. We need your support for our basic and applied human investigations. We ask that you consider favorably our recommendation for increased funding for the specific USDA research initiatives described. Thank you.

EXTENSION PROGRAMS

WITNESS

RANDALL L. RUTTA, NATIONAL EASTER SEAL SOCIETY

Mr. DURBIN. Randall Rutta, National Easter Seal Society.

Mr. RUTTA. Thank you, Mr. Chairman.

Mr. DURBIN. Did I get close to pronouncing your name correctly?

Mr. RUTTA. You did. Perfectly, actually.

I took to heart the two-minute deadline so I just wanted to come here and express appreciation for the subcommittee's support for a program in extension to help farmers with disabilities. This committee took an active role in initiating that program in response to concerns that were brought to it on behalf of tens of thousands of farmers and ranchers and seasonal and migrant workers with disabilities who are out there across the country.

I am very proud to be here on behalf of Easter Seals and really on behalf of that program to report back to the subcommittee and tell you what a tremendous success it has been. In the first year of operation, using an appropriation of $1 million, the ten states that received initial funding served some 900 farm families that are affected by disability across the country. They reached out and trained some 1000 rural health professionals, extension agents, rehab counsellors, various rural social groups, youth groups like FFA and 4-H. They really did an effective job in reaching out to them and talking about accommodating disability in agricultural operations and also just in the rural farm environment.

The same programs managed to reach out through county fairs, farm shows, those kinds of events and get information about farming and disability to some 2.3 million people that literally visited exhibits, received information, saw video tapes, rode lifts that were mounted on tractors, that kind of thing. And, in addition, hundreds of volunteers were recruited, primarily people with skills in the rural community, other farmers with disabilities that agreed to serve as peer counsellors have now become involved and are contributing to this program. And in my experience, that is a tremendous bang for the buck and we are just very excited to be a part of this effort.

In 1992, there were some additional funds put into the program and four new states were added and now in 1993 which for this program will be implemented on April 1st, we are expecting that there will be two new states to receive funding and we are very excited about that.

At the same time, we started with a strong base of knowledge concerning dairy farming and accommodating disability, various crop farming and timber with the forestry industry. We have since reached out to develop expertise to serve migrant and seasonal farm workers, to help people involved in other areas of agriculture like orchard crops and have even looked at helping people on the eastern shore with regard to the poultry industry.

So between programs being funded under this authority and then also the related efforts, the related interests that have been drawn in, that is excited about this outreach, I think we are really getting an awful lot of creative energy involved. I think you are fa-

miliar with some of the work that has been done in Illinois where in addition to the funds they receive under this program the Farm Bureau has assisted them in developing a directory for the entire state. Office of Rural Health Policy funds were brought in to train FFA youth to in turn work with younger children on farm safety, disability awareness. So we are really getting a synergy taking place here around this program and that is exactly what we envisioned.

In any given state, you are probably talking about three to four to five individuals actually receiving a salary under this program. In terms of full-time equivalents, it is probably about four and yet they are able to have that kind of level of outreach and effectiveness.

So we are just real excited about it. We will encourage the subcommittee to look at adding additional funds and I am really basing that encouragement on simply the level of interest. Eleven states applied this past year for funding, two will actually receive funding. It is our view that there are some 20 states that are interested really with 15 that are ready to roll. They have partnerships in place, some are even starting to provide services, distribute our materials, and so if funding allows at whatever level, I think those new states will be anxious to come onboard.

Thank you.

Mr. DURBIN. Thank you, Mr. Rutta. It is a good program and I am familiar with it. I think it really addresses a concern many of us have over the dangers of farming, which is truly the most dangerous occupation in America.

Mr. RUTTA. That is right.

Mr. DURBIN. Thank you for your testimony and happy Easter.

Mr. RUTTA. Thanks.

[The information follows:]

The Power To Overcome

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Oral Testimony of Randall L. Rutta

on behalf of the

NATIONAL EASTER SEAL SOCIETY

regarding the

Status of and Fiscal Year 1994 Appropriation for

the

U.S.D.A. Extension Service

"EDUCATION AND ASSISTANCE PROGRAM FOR FARMERS WITH DISABILITIES"

(Known as the AgrAbility Project)

before the

Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies

House Committee on Appropriations

Contact: Randall L. Rutta
Vice President, Government Relations

March 24, 1993

Mr. Chairman and members of the subcommittee, my name is Randall Rutta. I appreciate the opportunity to be here on behalf of the National Easter Seal Society to report on the tremendous success of the USDA Extension Service AgrAbility Project and make recommendations regarding fiscal year 1994 support for farmers with disabilities. I will submit a more comprehensive statement for the record.

Agricultural production is hazardous. Last year, over 140,000 agricultural workers were injured in farm-related incidents, with many incurring serious, permanent disabilities. Tens of thousands more become disabled as a result of non-farm injuries, illnesses, other health conditions, and the aging process. Most of these individuals want to stay in farming, and, with some assistance, the majority would be able to do so.

In 1991, the subcommittee invested $1.0 million in a new Farm Bill provision linking state cooperative Extension Services with nonprofit disability organizations to help farmers with disabilities and their families to stay in agricultural production. Today, that unique public-private sector collaboration, called the AgrAbility Project, is enabling thousands of farmers, ranchers, and farmworkers with disabilities in fourteen states to continue to earn their livings in agriculture and participate rural community life.

During its first fifteen months, eight AgrAbility projects serving ten states collectively assisted over 900 farm families affected by disability, trained over 1,000 county extension agents, rehabilitation counselors, and rural health professionals, recruited hundreds of rural volunteers, and reached over 2.3 million people attending fairs, farm shows, and other events to promote awareness of ways to accommodate disability in agriculture. First-year states served by AgrAbility were Idaho, Illinois,

Indiana, Iowa, Louisiana, Montana, New York, Vermont, Wisconsin, and Wyoming.

A fiscal year 1992 appropriation of $1.5 million allowed first-year AgrAbility projects to expand, and funded the implementation of four new projects in Michigan, Minnesota, North Dakota, and South Carolina. It is anticipated that the FY 1993 appropriation of $1.75 million will enable existing projects to expand slightly (about four percent) and support two grants of $85,000 each to initiate projects in two additional states.

The National Grant Program, carried out by the National Easter Seal Society and Purdue University's Breaking New Ground Resource Center, provides training, technical assistance, and information dissemination support to state-level AgrAbility Projects. Since 1991, the National Grant Program has conducted semi-annual training workshops, developed technical assistance materials, and distributed a monthly newsletter. In 1992, National Grant staff began providing information on accommodating disabilities in agriculture on a nationwide basis. Funding for National Grant program operations in fiscal year 1992 was approximately $175,000, representing about 10% of total project support.

AgrAbility is innovative and cost effective. It multiplies the impact of a modest federal investment by helping farm families affected by disability connect with existing public and private program services, local volunteers, and other farmers with disabilities who are to help each other. AgrAbility Project staff provide on-the-farm technical assistance on adapting and using farm equipment and tools, and on modifying farm operations and buildings. Staff educate rural professionals on ways to accommodate

disability in farming.

Since its inception, many more states have sought to participate in the AgrAbility Project than funds have allowed. Eleven Extension Service/disability agency partnerships in California, Colorado, Delaware/Maryland, Kentucky, Missouri, North Carolina, Ohio, Pennsylvania, South Dakota, Tennessee, and Utah submitted applications for 1993 AgrAbility funding. The majority of these had submitted proposals in prior years. Unfortunately, most of these applicants face disappointment, since the USDA Extension Service anticipates making only two awards this year.

Extension Service and disability interests in Arizona, Arkansas, Florida, Kansas, Mississippi, Nebraska, New Jersey, Oklahoma, Texas, Virginia, and Washington, have either submitted applications in the past or are actively exploring ways to collaborate on a future AgrAbility Project grant application.

The AgrAbility Project has emerged as one of the most successful, cost-effective programs serving rural America. The Project was recently identified by Rehabilitation International, a United Nations-affiliated organization, as a leading example of public-private partnership. The National Easter Seal Society, along with growing numbers of agricultural, disability, and rural health interests, supports greater investment in the AgrAbility Project as the best means of assisting people with disabilities working in agriculture and related occupations.

The National Society recommends that $3.6 million be appropriated for the AgrAbility Project in fiscal year 1994. This amount is less than that recommended last year, and only seventy-two percent of the authorized level for 1994.

Yet, an appropriation of $3.6 million would enable the eight first-year projects to achieve the Farm Bill funding minimum of $150,000; appreciably increase support for projects established in 1992 and 1993; establish new projects in fifteen states that are poised to participate; and support expansion of National Grant Program activities to keep pace with escalating demand for training, technical assistance, and information dissemination. This amount would also cover USDA Extension Service expenses for the Project, estimated at eight percent of total funding.

An appropriation of $3.6 million will in no way diminish the cost-effective, lean operating style that is so unique to the AgrAbility Project. AgrAbility staff would still be required to maximize existing resources, recruit volunteers, promote self-help, and use ingenuity in identifying low-cost solutions to accommodating disabilities in agricultural operations and rural living. An appropriation of $3.6 million will extend proven AgrAbility education and assistance to thousands of unserved farmers, ranchers, and other agricultural workers with disabilities who, by falling through cracks in the nation's service delivery system, often forfeit their agricultural livelihoods, rural lifestyles, and personal independence.

On behalf of the National Easter Seal Society and some nine million rural Americans with disabilities, thank you for the opportunity to present this statement.

RESEARCH PROGRAMS

WITNESS

LESLIE DIERAUF, AMERICAN VETERINARY MEDICAL ASSOCIATION

Mr. DURBIN. Dr. Dierauf, American Veterinary Medical Association. Thank you for joining us.

Dr. DIERAUF. Mr. Chairman, I appreciate this opportunity to present testimony before you today on behalf of the veterinary medical profession.

The American Veterinary Medical Association and the Association of American Veterinary Colleges intend, with your permission, to provide more specific written recommendations following the release of the President's budget.

And, again, with your permission, I will submit the full statement for the record.

Mr. DURBIN. It will be included in its entirety.

Dr. DIERAUF. Thank you.

The recommendations I make to the subcommittee today report a broad spectrum of programs for enhancing animal and human health, including animal health research and disease control, providing for the safety of the food supply, enforcing animal welfare laws and regulations, and facilitating the availability of safe and effective therapeutic agents essential to veterinary medicine.

Key program funding recommendations are the following:

We recommend maintenance of Section 1433, the Animal Health Research Competitive Grants. This is a unique program and we recommend slightly increasing the funding for this program to $5.995 million.

We recommend continued growth in the National Research Initiative, including $35 million for the Animal Systems component, research on the health and well being of animals.

We recommend that you restore and refocus Section 1414(2)(c), the Animal Health Special Grants, to address targeted needs in animal well being, emerging diseases and animal biologics. A minimum of $500,000 should be devoted to this program.

We recommend continued support for research conducted by the Agricultural Research Service to allow APHIS and the Food Safety Inspection Service to carry out their missions and provide adequate funding of upgrading of animal disease facilities at Ames, Iowa and Plum Island.

We recommend maximizing the benefits of the Food Animal Residue Avoidance Data Bank for USDA's extension service to track data on drug and chemical residues of animal origins and to include data on pesticide registration, international drug approvals and emerging industries such as aquiculture. A $1 million line item appropriation is recommended.

We recommend instituting core funding for the Animal and Plant Health Inspection Service for activities related to disease surveillance and monitoring and for responding to national and international disease emergencies.

We recommend increased funding for animal welfare inspection and enforcement within APHIS to $12 million.

We recommend fully funding the Food Safety Inspection Service through direct appropriations.

And we recommend that the FDA Center for Veterinary Medicine be adequately funded to expedite the approval of safe and effective animal drugs.

Appropriating funds for these key programs critical to veterinary medicine will promote programs such as C Dollars for addressing local disease emergencies, such as foodborne diseases, animal well being, including aquiculture, proper management and monitoring of natural resources and the environment with animals as sentinels of environmental health, performing research on emerging diseases of public health interest such as rabies and tuberculosis and other programs mentioned within in our written testimony.

Mr. Chairman, I appreciate the opportunity to present the views on behalf of the 53,000 veterinarians and 27 colleges of veterinary medicine nationwide and I would be happy to answer any questions you might have.

Mr. DURBIN. Let me ask you about Plum Island. I understand that for about 40 years now we have maintained that facility to quarantine animals that are suspected of carrying certain diseases. Is that necessary, to have an island offshore to quarantine an animal to guarantee the safety of the rest of the animal population and human population in our country?

Dr. DIERAUF. I think it is absolutely necessary. One of the projects that I was looking into this past week is APHIS is looking to upgrade the facilities at Plum Island and in so doing they are going to need to find biocontainment facilities around the country to house animals or organisms while the facilities are being upgraded.

And, first of all, there is not a good cataloging of that. We are trying to help them out with the veterinary colleges at least. But, secondly, the organisms that are on Plum Island in some cases are of international economic importance and do not exist in this country. And to remove them from the isolation of an island setting I think is quite dangerous.

Mr. DURBIN. Okay. Why do you oppose user fees for FSIS?

Dr. DIERAUF. We do not think that the Food Safety Inspection Service should be run on user fees because we feel that food safety is of national importance for everyone.

Mr. DURBIN. We have had some testimony earlier about the situation at FDA. There was an earlier group, maybe it was yesterday, I'm not sure.

Dr. DIERAUF. Who can tell at this point? [Laughter.]

Mr. DURBIN. But they brought that to our attention as well.

Dr. DIERAUF. Yes.

Mr. DURBIN. Thank you for your patience and your testimony. We appreciate it.

Dr. DIERAUF. Thank you. We appreciate being invited.

[The information follows:]

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Statement of the American Veterinary Medical Association
and the
Association of American Veterinary Medical Colleges
presented by Leslie Dierauf, VMD
to the
Subcommittee on Agriculture, Rural Development, FDA and Related Agencies
of the
House Committee on Appropriations

March 24, 1993

Mr. Chairman and Members of the Subcommittee: I appreciate this opportunity to present testimony before you today on behalf of the veterinary medical profession. At this time I would like to highlight some programs of critical importance to animal and human health in general terms. AVMA and AAVMC hope to have the ability to provide more specific written recommendations following the release of President Clinton's detailed budget proposal.

Historically, veterinary medicine has supported a broad spectrum of programs for federal funding. Key among these programs are several directly related to the goals of enhancing animal and human health, including animal health research and disease control, maximizing the safety of the food supply, enforcing animal welfare laws and regulations, and facilitating the availability of safe and effective therapeutic agents essential to veterinary medicine.

- **Maintain Section 1433 animal health research competitive grants as an unique program.**
 This small, but critical source of formula funds for veterinary medicine maintains animal health and disease research programs at regional, state and local levels, and includes animal health research by new investigators, seed dollars for addressing local disease emergencies and purchasing special equipment and supplies, graduate student stipends, and development of programs capable of attracting competitive funds from other sources. We recommend that this program be increased slightly to $5.995 million.

- **Continue growth of National Research Initiative**
 Several categories of research under the NRI contribute to the goals of enhancing human and animal health. The **Animal Systems** component of the NRI should be increased to $35 million to fund research that will protect the health and well-being of animals, including aquaculture species. The **Nutrition, Food Quality and Health** component should be expanded to sponsor additional research on food quality, food-borne diseases, and nutrition. The **Natural Resources and the Environment** component should be increased to promote proper management and monitoring of natural resources and the environment, including animals as sentinels of environmental health.

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- **Restore and refocus section 1414(2)(c) animal health special grants.**
 Until 1991, funds under this program were available on a competitive basis to investigate targeted health research needs of animals and animal production systems. It is important that this special grants program be reinstated in order to address targeted needs in animal well-being, emerging diseases, and much needed molecular research on vaccines and animal biologics. An example of a specific national need that would fit this grant program would be research focused on tuberculosis, as supported by the dairy industry.

 Other important special grants programs support the development of minor-use drugs through the Interregional Research Project 4 (IR-4) program. This program addresses animal species and therapeutic drug uses that are necessary but not economically feasible for development by the private sector. A minimum of $500,000 should be devoted to this program.

- **Continued support for research conducted by the Agricultural Research Service.**
 We support research required by APHIS and FSIS to carry out their missions -- from efforts to develop improved diagnostic procedures for diseases in domestic and wild animals, rapid and accurate field diagnostics for contaminants in food, to new and humane methods of animal euthanasia, as well as credible scientific guidelines for identification of stress in farm animals. We also recommend that Congress provide adequate funding to upgrade the necropsy facility and pathological waste incinerator at Ames, IA, and to make necessary renovations at Plum Island.

- **Maximize the usefulness of the Food Animal Residue Avoidance Databank (FARAD).**
 This Extension Service program is an invaluable resource that veterinarians rely upon to help producers avoid unwanted residues of drugs and chemicals in foods of animal origin. In addition, there is a need to expand this program to include data on pesticide registration, international drug approvals, and emerging industries, such as aquaculture. We support a $1 million line-item appropriation for FARAD.

- **Institute core funding for the Animal and Plant Health Inspection Service (APHIS).**
 Currently, the bulk of the APHIS budget is organized into line items for specific disease programs, leaving the agency with no flexibility to address new or emerging disease problems. We recommend that Congress restructure the APHIS budget and appropriate funds into a core of activities related to disease surveillance and monitoring, that would give APHIS the ability to respond in disease emergencies without compromising its other programmatic functions.

- **Increase funding for animal welfare enforcement.**
 Congress and the courts have continued to expand the scope of APHIS enforcement activities without a concomitant increase in funding. In order to begin to meet its responsibilities, with a corps of well-trained inspectors, APHIS requires a minimum of $12 million.

- The Food Safety and Inspection Service should be fully funded through a direct appropriation.
 AVMA opposes the imposition of user fees for this critical function. Veterinary medicine is committed to assuring a safe food supply and believes that a credible federal inspection program is a vital component of this activity.

- **The FDA Center for Veterinary Medicine requires adequate funding to expedite the approval of safe and effective animal drugs.**
 Veterinarians rely on the availability of animal drugs in order to treat their animal patients. Judicious use of animal drugs also plays an integral role in preserving the safety of the food supply. AVMA opposes the imposition of user fees to fund the animal drug approval process at this time. However, if user fees are levied, they should provide additional funding for FDA to increase its drug approval activities, rather than being applied to the general federal account.

Mr. Chairman and Members of the Subcommittee, I appreciate this opportunity to present these views and would be pleased to answer any questions you may have.

NUTRITION EDUCATION

WITNESS

NANCY CHAPMAN, THE SOCIETY FOR NUTRITION EDUCATION

Mr. DURBIN. Nancy Chapman who drew the last invitation and has waited now for several days, representing the Society for Nutrition Education. Thank you for coming by.

Ms. CHAPMAN. Congressman Durbin, I appreciate being here as the last witness. We figure it is probably the most important investment the subcommittee can make in our nation's health and we appreciate your putting nutrition education maybe at this point in your agenda.

I am the Director of Public Policy. Our board member from Illinois was not able to make the testimony today. She has sent with me some specific things about the programs in Illinois that I shared with Carolyn and will make some highlight remarks about it.

I did hear your remarks yesterday at Public Voice and was pleased to hear your commitment to agricultural research. I think this is way overdue also. The Society for Nutrition Education has joined AIN, as you heard Dr. Nichols earlier, in our long-term support of the nutrition research, the food safety research, and believe this is a cornerstone in it is important really in setting dietary guidelines.

Frequently what has happened is the NIH has focused the nutrition research on disease without really looking at the importance for the development of children, pregnant women, older Americans and really good health and I think that is the most important message that we as nutrition educators have focused on and I think it is one that we need to continue to buttress the research for.

But why I am here today is not necessarily to talk about nutrition research, though it is exactly what our members are trying to communicate to the public. They make it simple and they try to make it convincing to the target audience.

We represent about 2,300 nutrition educators who are located in all types of positions. Many of them work for food stamp programs and WIC programs and public health programs. Many of them are employed at FDA, at USDA, other government agencies. Some are employed on the Hill. And many of them are actually in food companies and in public communications like radio and television. So we try to get the message out in a number of different ways.

I am here today to speak about two programs that this subcommittee has been particularly good in supporting and those are the Nutrition Education and Training Program and the Expanded Foods and Nutrition Education Program. And I wanted to just speak to you specifically about our recommendations in regard to the budget last year.

The EFNEP budget was frozen, it has been frozen for two years, and the NET budget has been frozen for one year. The Nutrition Education and Training Program is a program that is connected with schools and with child care institutions to help kids get a head start in terms of their nutrition information and their health. And it is a program that was authorized in the 1970s for 50 cents

per child. Current appropriations run about 20 cents per child and to put that in perspective, a food company spends about $2 million just to advertise fast foods.

So we have a very uphill battle and the commitment we are asking for is up to the authorizing level of $25 million. That would be approximately 50 cents per child.

Now, the Society has entered into some exciting joint partnerships with places like McDonald's to do PSAs on Saturday morning television because we believe that you cannot fund it all through a federal program and we think this is an exciting new way that we have seen Dole, McDonald's and other food companies being to do PSAs to educate children and I think this will continue to go. But a lot of the baseline information happens through nutrition education and training.

As I have indicated here, EPNEP and NET really set out to improve eating habits. They also are important because they secure a number of private funding in addition to the actual programs. And they have worked to actually enhance job-related skills and let me just give you two examples in these programs.

In terms of EFNEP, and you may be familiar with it in Illinois, it has been an incredibly successful program, it brings indigenous people out of the community who can speak the language, who live in that culture, and they are able to communicate in the same language about household management skills. And frequently those people go on to take jobs in some food service operation or they may take it in some other way, they can use the management skills for household budgets.

The NET program, again, has taught a lot of food service workers how to implement the dietary guidelines and, as I am sure in conversations with Secretary Espy, you know, he has made a strong commitment to improving the school lunch program, to lower the fat, the sodium and sugar. We believe in order to do that you need to have school food service people that are trained and know how to implement it in the cafeteria. And NET for the last 15 years has been providing that to many of the school food service employees. We have a long way to go in order to implement that goal of the Secretary's.

In conclusion, I really think that we would like you to think about nutrition education as really a cornerstone, as part of really health care reform in some ways. It is the way to start people towards better health. And we have heard about this and we know that the WIC program is doing that in terms of starting them with better prenatal care and then a package when they are infants and pregnant women. It is important that we do not desert children, that we keep them going through child care and into the elementary school and even into the teens to know how to chose the right foods throughout a lifetime so that we can cut some of the costs that Dr. Nichols was indicating.

We also really believe that teaching healthy eating habits to children is a good way to start them in lifelong learning. A child needs to know how to eat well to stay healthy.

Just in terms of the program in Illinois, I think that has been so successful. One of the things, just as an example, in one year, there were 2000 volunteers giving 44,000 hours of volunteer time and

that is just an investment in one state, in one small program and I think that is how you can look at it, is for whatever you put in as a federal dollar it has state money and then it has a lot of volunteer time to get out to the community.

I thank you very much for this opportunity.

Mr. DURBIN. Thank you. I guess we have made some real progress in the last few years with the new labeling provisions coming out of FDA, which I assume your group approves of. And also you have already mentioned some of the heightened awareness of food chains in providing us with the kind of information that consumers need to know as more of us become dependent on those fast food restaurants for our regular meals.

Are you familiar with the role that the extension service plays in working with WIC recipients?

Ms. CHAPMAN. This has been a very exciting part of, I think, what extension is doing and it is a reason that we think you can expand really that role in looking at nutrition education because extension is so well respected, particularly in the nutrition area, not only WIC but I was talking to some people, MEDICAID is beginning to look to extension as a way to do some of the public health outreaches. The public health dollar and infrastructure has not been supported as well.

Extension has really served a major part. I know up in New York they have had a long-term contract with the WIC department to deliver the services. It makes good sense. As I indicated with EFNEP, they train indigenous people who can oftentimes communicate much more effectively with somebody of the same culture, the same neighborhood, more than somebody in another structure. And I think WIC tries to employ indigenous people as well but sometimes in that particular setting, the 30 minutes that you have to learn about the information, it is not like sometimes what happens with an EFNEP program. And I think it is working. I think there are a lot of other couplings.

Another exciting program is EFNEP is working with Girl Scouts, Boy Scouts, other community groups to get information out about nutrition.

Mr. DURBIN. Do you have an opinion on this Human Nutrition Information Service survey?

Ms. CHAPMAN. Let me tell you that has a lot to do with what we talk about when we talk about nutrition education and we look to HNIS who has developed materials over a long period of time that are very important in regards to the dietary guidelines, the food pyramid, the eating pyramid.

My own perspective of this is this is an organization that needs extremely good leadership and the early 1980s, I think, when you were on the Agriculture Committee, you may have recalled that reorganization hearing where they split apart the laboratories of nutrition research and they took off HNIS which was connected to all the laboratories and through ARS and it had a very strong research base. And in moving it, it moved a little bit too far away from that research base and there was not, as you were indicating earlier to Dr. Nichols, there was the lack of having really good oversight over contracting and really some good design methodology. And a lot of that can happen regardless of where it is. If it has

the right researchers, the right quality of people there with also the right mission, one of the things that I think, as you recall, Congressman Panetta put into the monitoring bill was a piece to include, make sure that the surveys reach low income people, the homeless, the hard to reach. And in that element, that is a very important thing that HNIS needs to continue to focus on so you as policy makers have the kind of data you need.

Mr. DURBIN. Thank you. Thanks for your patience in waiting a long, long time.

This meeting of the subcommittee will stand adjourned.

[The information follows:]

TESTIMONY OF
THE SOCIETY FOR NUTRITION EDUCATION

FOR THE
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
FOOD AND DRUG ADMINISTRATION AND
RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

MARCH 24, 1993

The Society for Nutrition Education (SNE) commends you and your Subcommittee for recognizing that nutrition education is a vital component of federal food programs such as, the Child Nutrition Programs, Women Infants and Children Program, and Cooperative Extension. Helping low-income adults and children improve their diets protects their health. The Society represents 2,300 nutrition professionals working to link the fields of nutrition, food and education. We appreciate the leadership that this Committee has given to nutrition education programs over the years.

The Society for Nutrition Education seeks an appropriation increase in two of the federal nutrition education programs, Nutrition Education and Training (NET) and Expanded Food and Nutrition Education Program (EFNEP). NET funds have been frozen at the FY 1992 level and EFNEP at the FY 1991 level. Our organization is asking for the authorized funding amount for the NET Program of $25 million which provides $.50 per school child to assure their nutrition literacy. Current funding is at $.20 per school child. We request an inflationary increase for EFNEP to $65 million in FY 1994. Although SNE whole heartedly supports proposed funding increases for WIC, we believe nutrition education is also a fundamental component of health promotion and disease prevention, and thus should receive a modest increase.

Both EFNEP and NET have a proven track record for success in 1) improving eating habits, 2) securing additional state government funds and private sector supports, and 3) enhancing job related skills. The Nutrition Education and Training program trains school teachers, school food service personnel, and other educators; provides opportunities for children to learn about good food habits in the classroom and through the school food service that prevent or decrease complications of chronic disease; and provides guidance to school food service personnel on preparing meals that meet the Dietary Guidelines for Americans.

The Expanded Food and Nutrition Education Program helps low-income families, those often most affected by chronic disease and with limited access to health care, make the most of their scarce resources. The outreach efforts of EFNEP teach program participants to plan for daily food needs and prepare nutritious, low-cost meals, to select and buy food economically, and to effectively use other supplemental programs available to them. Indigenous paraprofessionals employed by EFNEP adapt nutrition education materials and classes to the target ethnic groups. As more families and children live in poverty, their risk of nutritional deficiencies grows, and the potential benefits from nutrition education accelerate. A modest increase in NET and EFNEP

can make the difference between these families taking control of their nutritional well-being or remaining in nutritional crisis. The following examples highlight successes of NET and EFNEP that justify an additional investment in these programs.

In **Ohio** a universal breakfast program was piloted with NET funds and remarkable results have occurred. By making the pilot program available to all students, student participation also increased in the school lunch program. Student participation in the breakfast program continues to be strong even at the end of the pilot program. A "Nutra Buddy" activity funded by NET in West Alexandria, Ohio, matched second graders and high school nutrition students for class activities promoting healthy eating practices. This program was recognized as an Excellence in Nutrition Education Award at the 1992 annual meeting of SNE.

In **New York**, the highly acclaimed elementary program, Nutrition Comes Alive, integrates nutrition into other subject areas such as math, language arts, science, fitness and music. A year ago, the secondary program, Nutrition for Life, developed jointly by Cornell University and the New York State Departments of Health and Education, received the National Nutrition Education Award from the American Home Economics Association. Supplementing these programs, NET will soon be releasing new materials reaching preschool, special education, school feeding and after school audiences.

Illinois Expanded Food and Nutrition Education Program staff provided a comprehensive nutrition education program to nearly 11,000 adults and 9,000 youth participants in 1992. The EFNEP nutrition paraprofessionals tailored nutrition programs on fad diets and the 1990 Dietary Guidelines for those with limited resource families. EFNEP educators also taught nutrition to pregnant and non-pregnant teens. To increase their knowledge about keeping food safe to eat, a special food safety calendar was developed and distributed to EFNEP adult participants .

Participation in the **New Mexico** EFNEP program has enhanced the family unit. Homemakers have improved eating habits, food planning and shopping skills, and kitchen safety operation through several state-wide education efforts. As a result, participants have started exercising, stopped smoking, and enrolled in training programs to enhance employment opportunities in the health care field. Some mothers have even received custody of their children as a result of improved parenting skills learned from EFNEP nutrition educators.

In **Indiana** the successful program, "Have a Healthy Baby", is designed to help pregnant teens and adults understand the importance to selecting nutrient dense, low cost foods daily. The EFNEP nutrition educators also focus on the relationship of lifestyle choices, such as drugs, alcohol, and smoking, that affect the health of the baby.

Nutrition education is a cornerstone of health care reform that empowers individuals to change their diets and prevent disease. SNE asks the Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Subcommittee to invest in NET and EFNEP. Teaching healthy eating to those at nutritional risk, children and low income families, can yield a healthier work force and a lower bill for health care.

TUESDAY, MARCH 30, 1993.

AGRICULTURAL RESEARCH

WITNESS

SHELBY F. THAMES, UNIVERSITY OF SOUTHERN MISSISSIPPI

Mr. DURBIN. Welcome to this meeting of the Subcommittee on Agriculture, Rural Development, Food and Drug Administration and Related Agencies.

We are now going to be hearing from public witnesses. There are several who have not arrived so we will go to the first, I believe, who might be here, Dr. Shelby Thames, I hope I am pronouncing it correctly, University of Southern Mississippi. Please come right on up here.

Mr. THAMES. I guess there is some advantage to being early.

Mr. DURBIN. Yes, that is right. Thank you for joining us today. We have your testimony, if you would like to summarize it for the record, and I might have a question or two for you.

Mr. THAMES. Fine. Thank you, sir.

I, first of all, appreciate very much being able to come and testify before your committee, Mr. Chairman, and I would respectfully request that this written testimony become part of the official record, if I might.

Mr. DURBIN. It will.

Mr. THAMES. The U.S. Congress has provided funds over the last several years for activity at the Mississippi Polymer Institute and we are, of course, requesting that we continue to receive some appropriations for that. And as also part of the written record, I will not go into it at this time, but what I would like to do, sir, is to share with you the sort of work that we are doing and I hope it will be as interesting to you as it is to me, of course.

I am a polymer scientist. Polymers are large molecules, plastics and fibers, composite materials, textiles, elastomers, and they are materials that typically can be designed for a wide variety of applications.

What I am primarily interested in is to devise new polymers from agricultural materials. In other words, trying to find applications for ag materials in an industrial setting.

Mr. DURBIN. Would you pull that microphone a little closer there?

Mr. THAMES. Yes, sir.

Mr. DURBIN. Thank you.

Mr. THAMES. Obviously we can use ag materials for food and fiber but I am primarily interested in their industrial applications. And I have some examples here today of some work that we have done with the appropriations that you provided in the past and I

will leave this with the staff but I will show you these items and describe to you what they are and our thrust behind them.

For instance, on my left here, you see a foam. This foam is made from Lesquerella, which is a crop that can grow in several areas of our United States. It provides a triglyceride which is a chemical structure much like castor oil.

Now, castor oil is totally an imported product. We import somewhere between 35 and 50 million dollars of castor oil each year. We can do the same sorts of things with Lesquerella that we can do with castor oil. And my objectives are to show the advantages of Lesquerella, to show that you can indeed substitute Lesquerella for castor oil, to show that indeed in many of the applications Lesquerella can do a better job than castor oil because Lesquerella is more water-resistant or hydrophobic, as we would say.

Here are some examples of some materials that we have made from Lesquerella. First, the foam. A wide variety of foams can be made of different types for padding in these chairs all the way to use in automobiles and a wide variety of other things.

Also, I have made a film here which shows that we can make good quality coatings out of it, industrial coatings, of the type that might be used on furniture, automobiles and what have you.

And I have also shown there is another type coating called a polyester that we have made from Lesquerella oil which in this particular case is applied to metal.

So there are a wide variety of applications and the reason that I am interested in doing this is unless I can show some uses of Lesquerella then there is no real need for the farmer to grow it. So I am trying to find markets, high value markets, where the farmer indeed might say, heck, I should grow some of this material.

The next page of this document shows a slide of some materials where we have done some work in the anti-barnacle arena. Actually, while you may not see it very well, this panel on the right-hand side here, sir, has no barnacles growing on it at all. The other two panels do have barnacles growing on it, they are rather heavily infested, and the difference is that the panel here with no barnacles contains a resinous material from a natural product called guayule and that is a plant that is grown in the southwestern part of the United States.

And what we are attempting to do in our research is to determine which of these chemicals in this resinous material is actually the biologically active component. There are 42 different fractions or 42 different chemicals that make up the material that was put in this paint. We have isolated that down to seven, a group of seven materials. One of those seven or two of those seven have activity. We now want to isolate that down to the one individual component that has this biological activity.

We have a technical partner, it is called U.S. Paint Company in St. Louis, Missouri, who has agreed to make a financial contribution to this work and as such they will apply this to—put it in the commercial market. For instance, they are the company that made the coating that is made on Dennis Connor's yachts. So they have the ability to market this, put it into application, and what we are trying to do is find out the biological agent that causes that activity.

Right now, yachts and boats that are using anti-foulant coatings use copper and tin as biocides and those are flooding our oceans with metals which are toxic. And here we have an example that Mother Nature has made a product, a renewable resource, that has biological activity that appears to, at least in these cursory results, provide very efficient activity as far as biological activity is concerned.

Here is an example—this is a typical piece of oak wood that might be used in a parquet flooring. And, as you see from the back side, the wood is beautiful but the grain is not brought out to any degree.

We have made a stain from Lesquerella again and that is of course bringing the grain out, it does a very fine job. But here we have a natural product which is wood, we have a natural product which is Lesquerella, and then from another natural product we have made a clear varnish.

Now, the unique thing about this varnish is that it has no solvents in it. When it was applied to this piece of wood, it was a free-flowing liquid. And in the area of polymer applications, everyone wants to do away with volatile organic compounds or VOCs because they pollute the atmosphere. So we found a way using natural products to have a coating that is 100 percent solids and after you shine an ultraviolet light on this coating in two seconds it becomes very, very hard and this coating is almost unscratchable.

So what we have done basically is taken a piece of natural wood, which is a natural product, we have put a stain, which comes from a natural product, we have taken a clear coating on top, which is ultraviolet cured from a natural product, and that can constitute a floor.

One other particular component of this chemistry which is important is the fact that we would put an adhesive on the back here. That would be a pressure sensitive adhesive. And I have taken this little insignia of the University of Southern Mississippi and put on the back a pressure sensitive adhesive and you cannot remove it. It adheres very well.

So if a pressure sensitive adhesive is put back here, you can apply the tile to a floor and now you have it locked into place.

The significance of this is simply this: the adhesives that are used today come from petroleum-based product, oil, not agricultural commodities. The coatings that are used today are primarily from oil or non-agricultural commodities and the stains are from oil-based materials. And we have a system, a coating-flooring system then, that could be used that is completely from agricultural commodities, no petroleum products at all.

So my activities at the Polymer Institute at the University of Southern Mississippi is to determine alternative uses of agricultural crops, to place them into the polymer industry, to find potential applications for those so that farmers might say, well, I want to begin to commercial Lesquerella, I will grow some Lesquerella, I want to grow guayule, I want to grow canaffe.

So that is my purpose of being here today, is to give you briefly an overview of how we have used the monies that you have appropriated in the past. I would be happy to answer any question that you might ask. I feel that I do not want to take up too much of

time of the committee's but I could talk for quite some time longer, I am sure you realize that. But if you have any questions, sir, please let me know and I will be happy to answer those and thank you so much for your past support.

Mr. DURBIN. You bet. And I want to tell you you are indeed a fortunate man because the subcommittee expert on guayule just came in the door.

Mr. Skeen.

Mr. SKEEN. As well as my cohort.

Mr. THAMES. Yes, sir.

Mr. SKEEN. I am still learning how to pronounce it.

Mr. DURBIN. I think I am still short of the mark.

Mr. THAMES. Mr. Skeen, I have heard a lot about you and the comments were very good, I might add.

Mr. DURBIN. In guayule circles, he is well known.

Mr. THAMES. He is well known in Texas and New Mexico and out in Arizona, I can assure you.

Mr. DURBIN. Well, you usually get the best comments when you are not well known.

What I would like to do, Mr. Skeen, is I would like to ask Dr. Thames a few questions and I will run vote and then, if you want, carry on and ask a few of your own.

Mr. SKEEN. Sure. If he is an expert on guayule, we will complement one another and leave it at that.

Mr. DURBIN. All right.

Let me just ask you this. Now, your research center has been in place for a few years now.

Mr. THAMES. Two years.

Mr. DURBIN. Are you finding that any of the products you have developed are in and of themselves cost competitive?

Mr. THAMES. Yes, sir. For instance, first of all, we have not finally commercialized the product but I know for a fact that this guayule product would be cost competitive as an anti-foulant agent because anti-foulant coatings sometimes sell between $200 and $300 per gallon.

I have discussed this matter with the people at U.S. Paint who are our industrial partner and they assure me that this material will be cost competitive at that price. There is a tremendous markup in that particular commodity.

In addition to that, while I cannot speak to the cost competitiveness of Lesquerella, I would certainly be surprised to think that it would be extraordinarily expensive to grow. It does not appear that it is from the information I have received from Mr. Thompson in Arizona and other individuals who are with the CSRS and ARS. But unless we get a market for these materials, there is no incentive for a farmer to grow them.

So while not being able to give you exact dollar values of dollar per pound, I cannot do that, but I am certain that they will be cost competitive.

Mr. DURBIN. I am going to leave you in the capable hands of Mr. Skeen while I run to vote.

Mr. THAMES. Yes, sir.

Mr. DURBIN. But perhaps he can pursue some questions. We have had some other groups come before us talking about alternative ag-

riculture, some different ideas, and commercialization. Maybe you could share with him for the record what progress you have made.

And I will leave you with this thought; we are under a terrific amount of pressure from two different quarters, first on the budget side, which is fairly obvious, and second those who have critical projects such as your own because they are earmarked by Congress. I for one believe that many of these earmarked projects turn out to be very valuable and that if we can justify them in terms of the science and the ultimate benefit to the taxpayer, then we should pursue them. I would appreciate it if you would put on the record, as you are responding to Mr. Skeen, basically what your goal is at the Polymer Research Institute and how much support you are getting from the State of Mississippi, what you are asking from us, and whether you have any specific target dates for producing products in the commercial sector and that sort of thing.

I am going to run vote and leave it in his hands and I will be back in just a few minutes.

Carry on.

Mr. SKEEN. Thank you, Mr. Chairman. And I hope that you vote right. It is a world-shaking vote on adjournment.

Dr. Thames, I apologize to you for not being here but I was doing the first half of the voting.

Mr. THAMES. No problem. Did you vote right?

Mr. SKEEN. Yes, sir. I always vote right. [Laughter.]

Go ahead. Would you continue and respond to those questions that the chairman left? And I am also very much interested in the marketability because we have to defend these exotic named resources that you are producing. It is a joy to us that know something about how difficult your task is and we appreciate the help that you give us.

Mr. THAMES. All right, sir. Thank you.

As I was speaking to Chairman Durbin before you walked in, sir, I would like to just digress a moment and point out that this is a product from guayule. This is an ultraviolet cured coating that is made from guayule extract. And that material is very hard, very sound, very durable. You can try to extract it or wash it away with a product called methyl-ethyl-ketone, which is typically used to determine the chemical resistance of a material, and it is unaffected by that at all. It is a beautiful material.

Mr. SKEEN. Well, it certainly is a different material than the tires that we were going to make out of it.

Mr. THAMES. Yes, sir. Well, actually, what we found is some of the co-products from guayule are more valuable than the natural rubber.

Mr. SKEEN. Well, I am sure because it gets into the whole area of polymers.

Mr. THAMES. Yes, sir. The problem that I have and I guess any individual in my position would have in coming before you today is to talk about the commercial viability of these products.

Unless we have products that can survive in the marketplace such as these, then there is no need for farmers in New Mexico or Texas to grow guayule because there is no way for them to sell them.

Mr. SKEEN. That is the whole point.

Mr. THAMES. There is no way. There is not a commercial market for this product now because there is not enough guayule grown. I can assure you that if there were enough guayule grown for me to produce this in mass volume that there would be use for it in the furniture industry and in the hardwood industry, parquet flooring, for instance, because this material has no solvents in it. There is no lacquer thinner, there is no organic solvents, it is 100 percent solids. And it is a very highly efficient material.

So what we have to do in order to commercialize this is to grow enough guayule to make it a viable material. And there are two questions that we are always asked when we go to industry: how much of this can you provide and how much will it cost per pound?

So I cannot tell you that I have a product that is commercialized. What I can tell you is that I have four or five materials, as I have shown today, that are as good as or better than anything on the market today and that would be replaced by these materials if they were available at a competitive cost. The stain, the pressure sensitive adhesive, the ultraviolet cured coating, chlorinated rubber, the Lesquerella foams.

Lesquerella, by the way, Mr. Skeen, is also a very efficient dispersant for pigments. It is better than any commercial dispersant that we have taken a look at and a dispersant is something that deagglomerates pigments to give high gloss, high performance finishes.

So there are numerous applications that we would find use for these in if we had them available.

Example: Dr. George Buffkin, Vice President of Research for Sherwin-Williams Corporation, saw the dispersants that we made from Lesquerella. He says if you can provide me this material at a cost competitive price I will put it into the marketplace. That is George Buffkin, Vice President of Sherwin-Williams Corporation. But right now I cannot do that because we do not have a large enough volume of that material.

There is a company called Merichem in Houston, Texas that is in the business of selling napthenic acids. They are interested in marketing this material for a dispersant as well as Sherwin-Williams.

So I can tell you that I could put these in the marketplace if I had enough of them.

Mr. SKEEN. Do you have any program to expand the production?

Mr. THAMES. No, sir. That is not part of the system.

Mr. SKEEN. Or any interest?

Mr. THAMES. Well, I am a polymer scientist.

Mr. SKEEN. Part of the tech transfer framework——

Mr. THAMES. Well, the CRS group does that. They are involved in increasing the production of Lesquerella, attempting to get additional monies to increase the production of guayule, but that is not a part of the system or the program that I am involved in.

Mine is to take the materials and find industrial applications for them as a polymer scientist. I am not in agriculture per se in terms of growing it or harvesting it. I am involved in it in terms of how do we use the material once we have obtained it.

Mr. SKEEN. The real problem is finding somebody that wants to get into the chain of marketability with you.

Mr. THAMES. Yes, sir. One of the things that I really am optimistic about in the areas that I have worked, I believe that these products would carry themselves without subsidies because we found numerous applications of the co-products so that instead of having a lot of waste, a lot of by-products that have no value, we have been able to show where there are tremendous uses of those by-products such as the anti-foulants, the foams, the dispersants and materials of that type.

Mr. SKEEN. Are you doing any work with jojoba?

Mr. THAMES. We are just beginning that. Yes, sir. We want to do that and also with vinonia oil.

Mr. SKEEN. Vinonia?

Mr. THAMES. Yes, sir.

Mr. SKEEN. Well, some of the lead institutions dealing with that have been in the southwest. Do you follow on with their research?

Mr. THAMES. Yes, sir, I do.

Mr. SKEEN. Is there a natural transition or do they lose interest some place else and you pick it up?

Mr. THAMES. No, sir. I follow along with them. I am closely associated with the Texas A&M University, with the University of Arizona.

Mr. SKEEN. What was that university again in Texas? [Laughter.]

Mr. THAMES. Texas A&M and New Mexico State, University of Arizona.

Mr. SKEEN. They are all pretty good.

Mr. THAMES. Yes. As a matter of fact, they are making a submission for an ARC center, a southwestern center for alternative agriculture. They have asked me to join in, to be part of that, although I am in Mississippi because they want my expertise in the polymer application and I am more than happy to do that. I have a lot of friends out there. So I do follow them, I am associated with what they are doing and I am part of that project, as a matter of fact.

Mr. SKEEN. Well, it seems the problem is that you find in some of these materials that we can get some kind of a vehicle to move this kind of production. It may take some time because this is not the right year to start that kind of a program since we are not putting money in new starts.

Mr. THAMES. No, sir.

Mr. SKEEN. That is, I think, a horrible waste.

I appreciate very much your testimony.

Mr. THAMES. Thank you.

Mr. SKEEN. Ms. Kaptur, do you have any questions?

Ms. KAPTUR. I do not have any questions. Thank you.

Mr. SKEEN. Thank you very much, Doctor. We appreciate it.

Mr. THAMES. Thank you, Mr. Skeen. It is nice to finally have met you, sir.

Mr. SKEEN. My pleasure.

[The information follows:]

TESTIMONY OF
DR. SHELBY THAMES
DISTINGUISHED UNIVERSITY RESEARCH PROFESSOR
PROFESSOR OF POLYMER SCIENCE
UNIVERSITY OF SOUTHERN MISSISSIPPI
HATTIESBURG, MISSISSIPPI
BEFORE THE
HOUSE SUBCOMMITTEE ON RURAL DEVELOPMENT,
AGRICULTURE, AND RELATED AGENCIES
MARCH 30, 1993

Mr. Chairman, distinguished Members of the Subcommittee, I would like to thank you for this opportunity to provide testimony to you concerning the ongoing efforts of the University of Southern Mississippi (USM) and the Mississippi Polymer Institute. I would also like to repeat my expression of gratitude to the Subcommittee for its many years of leadership and support of the Institute. This testimony will include an update on the progress of the Institute since my testimony of one year ago.

In 1983, the Mississippi Legislature authorized the Polymer Institute at USM to work closely with emerging industries and other existing polymer-related industries to assist with research, problem-solving, and commercializing efforts. As an integral part of the basic research and educational mission of the Department of Polymer Science, the Institute provides industry and government with applied research, development support, and other commercializing assistance in key problem areas. This effort complements existing strong ties with industry and government involving exchange of information and improved employment opportunities for USM graduates. Most important, through basic and applied research coupled with the developmental and commercializing efforts of the Institute, the Department of Polymer Science will continue to address national needs of high priority.

A major goal of the Institute is to assist with commercialization of alternative agricultural crops through applied research and product development. The polymer industry is the largest chemical products industry in the world and heretofore has been highly dependent upon petroleum utilization. However, the efforts of the MPI are focusing on reducing our nation's dependence on petroleum usage via commercializing agricultural materials as petroleum substitutes. As we move forward with these commercializing efforts, our national dependency on imported petroleum and imported farm crops will diminish and the result will be new cooperative opportunities for American farmers and American industry. Your decisions will affect our ability to accomplish these goals as funding from this Subcommittee has enabled the Institute to implement and maintain an active group of university-based polymer scientists whose energies are devoted to commercializing alternative crops. We are most grateful to you for this support and ask for your continued commitment.

The faculty, the University, and the State of Mississippi are strongly supportive of the Mississippi Polymer Institute and its close ties with industry. Most faculty maintain at least one industrial contract as an important part of extramural research efforts.

Polymers, which include fibers, plastics, composites, coatings, and elastomers, play a key role in the materials industry. They are used in a wide range of industries including textiles, aerospace, automotive, packaging, construction, adhesive, medical prosthesis, and health care to name but a few. In the aerospace and automotive applications, their reduced weight and

high strength factors make them increasingly important as fuel savers. Their non-metallic character and design potentials make them suitable for many national defense purposes. Moreover, select polymers are possible substitutes for so-called strategic materials, some of which come from potentially unreliable sources.

Polymer applications also includes advanced composite materials. These lightweight, high-strength polymer compositions are replacing steel and other conventional metals in the housing, automotive, and aerospace industries. In the housing and construction industry, for example, an industry which represents the second largest market for polymer resins, polymers are used in the manufacture of doors, piping, thermal foam insulation, paint, floor and wall coverings, and windows.

As a polymer scientist, I am intrigued by the vast opportunities offered by American agriculture. As a professor, however, I am disappointed that very few of our science and business students receive training in the polymer-agricultural discipline and the enormous potential it offers.

I became involved in the polymer field 29 years ago, and since that time have watched its evolution where almost each new product utilization offered the opportunity for many more. Although polymer science as a discipline has experienced expansion and a degree of public acceptance, alternative agricultural materials are an under-utilized national treasure for this industry. Petroleum derived raw materials have heretofore made up the bulk of the raw materials for the polymer industry. However, there is less acceptance of petroleum derived materials today than ever before and consequently the timing is ideal for agricultural materials to make significant inroads as environmentally friendly, biodegradable, and renewable raw materials. These agricultural materials have always been available for our use yet society, for many reasons, has not recognized their potential. I would like to share with you four examples to support this tenet:

- First, mother nature uses the guayule plant to synthesize natural rubber or poly-cis-isoprene of higher quality than synthetic rubber that is prepared in a laboratory setting. In addition to high molecular weight natural rubber, at least four other coproduct fractions are obtained and we have developed commercially viable products from two of the four coproduct fractions. The products are **chlorinated rubber, acrylated chlorinated rubber, strippable coatings, pressure sensitive adhesives, and 100% solids ultraviolet cured coatings.**

- Secondly, we are exploiting the potential of Lesquerella, a crop that produces a triglyceride similar to castor oil. Castor oil is used extensively in industrial products and its entire U.S. supply, $27-55 million, is imported. We have developed several products from lesquerella including polyesters, stains, foams, and pressure sensitive adhesives.

- Third, our greatest scientific minds, when pitted against the barnacle or zebra mussel, have only managed to pollute our national waters with copper, tin and other heavy metals. However, mother nature, via the Guayule plant, has provided a non-metallic, natural product(s) with significant biological activity against fouling organisms. We are working cooperatively with the U.S. Paint Corporation of St. Louis, Missouri as an industrial partner to commercialize this product.

- And fourth, the properties of flow, leveling, gloss, substrate and environmental protection, provided by coatings and paints manufactured from vegetable oils and other agricultural materials have not been equalled by even our brightest scientists. We are currently utilizing lesquerella oil in combination with other materials as a grinding aid for hard-to-disperse pigments. Our initial results indicate that it is far superior to commercially available dispersants and that it provides significant anticorrosive benefits to water-borne coatings applied to metal substrates.

Thus, it is clear that commercial utilization of agricultural products can occur, but only after the commitment of the proper energy, organization, effort, and financial support. United States agriculture has made the transition from the farm fields to the kitchen tables, but U.S. agriculture's transition to America's industrial manufacturing facilities has been frightfully slow and has not kept pace with our national needs. With proper emphasis and support, U.S. agriculture can:

- Reduce U.S. reliance on imported petroleum.
- Maintain a healthy and prosperous farm economy.
- Foster new cooperative opportunities for American farmers and American industry.
- Reduce reliance on imported, industrially significant, strategic materials.
- Investigate potential opportunities for the commercialization of alternative crops in America.

These are exciting times in which to live and to contribute to the development of a powerful link between American industry and American agriculture. The U.S. Congress was wise to authorize, via the 1990 Farm Bill, the establishment of the Alternative Agricultural Research and Commercialization (AARC) Board and the National Centers concept. The National Research Initiative is still another means of promoting the value of U.S. agriculture. However, we must intensive our efforts to effectuate meaningful and definite progress toward revitalization of U.S. agriculture. It is my belief that our efforts should include:

- A restructuring of the traditional vision of one's mindset of agricultural crops so that they are viewed as raw

materials for industry and as food sources for human and livestock consumption.

- Organization of a technical partnership comprised of motivated, creative, scientific and industrial leaders, representatives from the Federal Government, commodity groups, private firms, universities, and environmental groups with the objectives to determine non-food and fiber opportunities for America's agricultural crops. After sufficient study, the partnership would offer specific opportunities for commercialization of agricultural crops. This assignment would require time, study, and thought as any recommendation must be based on sound business and scientific principles interspersed with a proper ration of informed entrepreneurial risk-tasking. I suggest that these responsibilities be included as objectives of the National Centers.

Additionally, the partnership would offer seminars and instructional materials designed to:

- Provide information and data concerning our nation's environmental needs and challenges.
- Disseminate information regarding raw material composition of America's agricultural crops and the scientific and business opportunities it presents.
- Appreciate the significance of the economic viability of coproduct utilization.
- Cultivate an understanding of the economic challenges of growing, harvesting, and processing agricultural crops.
- Appreciate and promote the scientific merit and sophistication of American agriculture, just as scientists understand the global petrochemical industry and the raw materials offered by the petroleum industry.

The result of the technical partnership's efforts would produce a healthy and objective debate and would be the basis for sound Congressional recommendations. This group should be prepared to withstand strict scrutiny and justify meaningful support from the U.S. Congress.

The image of American agriculture must be improved so as to entice the most intelligent minds and assertive personalities of our scientific and business communities. In short, American agriculture needs a higher profile. To this end, the technical partnership would raise the consciousness of the American public and the private sector for the utilization of renewable agricultural and forestry materials in the manufacturing of industrial products. This could be accomplished via:

- Establishing a dialogue on the Department of Agricultures's initiative to expand and accelerate development of new crops and new uses for agricultural materials.
- Discussion of market needs and the potential utility of

agricultural materials to meet these needs.
- Incorporating new scientific and technical tools designed to accelerating products and process movement into the marketplace.
- Updating USDA's implementation of AARC.

The technical partnership should develop concepts embracing technical expertise as a justification for establishing national centers. They should recommend significant funding levels for research/development commercialization efforts on priorities established by the group, and they should monitor the activities closely to ensure conformity to the stated commercialization goals.

Mr. Chairman, your leadership and support are deeply appreciated by the entire University of Southern Mississippi community. While I can greatly appreciate the difficult financial restraints facing your Subcommittee this fiscal year, I feel confident that further support of the Mississippi Polymer Institute will continue the dividends of increasing commercialization opportunities of agricultural materials in American industry. Advances in polymer research are crucial to the food, transportation, housing, and defense industries. Therefore, we respectfully request $1.2 million in federal funding to exploit the potentials of commercializing alternative agricultural materials and to continue our initiatives. Thank you Mr. Chairman and Members of the Subcommittee for your support and consideration.

CROP INSURANCE PROGRAM

WITNESS

NELSON MAURICE, CROP INSURANCE RESEARCH BUREAU, INC.

Mr. SKEEN. Nelson Maurice, Crop Insurance Research Bureau.

We welcome you here and we are glad to have your testimony.

Mr. MAURICE. Thank you, sir.

I am appearing on behalf of the Crop Insurance Research Bureau. It is an organization of approximately 40 insurance companies that are involved in crop insurance. Some of them are in the FCIC program and some of them are in entirely private programs.

We appreciate the fact that the subcommittee is taking time to listen to our comments and consider the situation at FCIC. We have submitted a statement. I will not repeat that but I would like to review a couple of points in that statement.

The first point is that we feel very strongly that this program is very important to American farmers. Farmers are now paying approximately $500 million of their own money to FCIC to buy the crop insurance that FCIC provides. We do not think that they would be providing their own money if they did not believe it was a good program and that it was important for them.

The second point we would like to make is that the FCIC product is unique amongst the products provided by government for farmers in that it performs a function, the guarantee of credit, that no other product does provide. The impact of this on ag lending is very powerful. It leverages funds from the private sector into agriculture, funds that government would have to provide if FCIC was not leveraging this private credit.

The third point I would like to make is that we believe that significant savings are possible in the FCIC program and we are aware that this committee is focused on that and quite properly so.

In our paper, in our presentation, we are bringing up a different concept, I believe, than has been brought up in the past. We are talking about a structural issue.

In 1980 when the act was redone, we believe that there was an error made at that time that no one recognized. In 1938, when this program first started, it was the first multi-peril crop insurance program on the planet. Congress set it up, gave it one function, to go out and provide a risk management tool for farmers and it gave it one tool to do that. One mission, one tool. They were able to do crop insurance and that was what they were supposed to do.

In 1980 we gave them two missions. We said we want you to continue doing risk management but now we want you to do something else. We want you to make disaster relief not as necessary and not as frequently occurring as it has been. You are now going to have to do two jobs but inadvertently we left FCIC with just one product, one tool for doing these two jobs. And it hampered them very severely.

Over the years, FCIC was not free to tighten down the underwriting, the rate making and those parts of its nature hard enough to bring losses under control because they were afraid of losing participation. On the other hand, they did not go crazy and completely abandon underwriting discipline, which certainly would

have brought participation into the program, because they knew that would create excessive losses.

So we have a program that is being consistently criticized for having excessive losses and inadequate participation and we believe that this is the result of this one product trap that was inadvertently set in 1980.

We believe that the solution to this is implementing a two-product strategy: continuing with the multi-peril crop insurance program that FCIC has been offering for years, which is absolutely essential to the bulk, to the medium range of farmers who need to guarantee their operations, who need that risk management function up front, but at the same time adding some kind of basic crop insurance product into FCIC that would be purchased or used by the farmers who do not need risk management. The very, very large farmer has assets of its own and does not need a risk management tool but these folks do demand support when it comes to offering disaster programs.

So we believe that if FCIC had two products, a multi-peril program for folks who need risk management and a basic crop insurance product for the other farmers, we believe it would have the freedom to move in the direction that you folks want to see and that we want to see, too, of tightening down the underwriting, bringing down the losses and achieving the high participation that is necessary, that everybody wants to see happen.

The final point I would like to mention is that our organization has a great deal of respect for what FCIC has done. It is important for farmers. And we recommend to this committee that it provide the funding that FCIC needs to achieve its missions.

And I will stop there, sir.

Mr. SKEEN. Thank you, Mr. Maurice.

And now with the chairman back, I will cede the responsibility of beginning the questioning.

Mr. DURBIN. Thank you, Mr. Skeen.

I am sorry I missed your testimony but we have spent a lot of time looking at the federal crop insurance program. In fact, I asked the administrator of the program if in fact you could call it insurance and he said, no, you could not because the premiums collected are not nearly enough to pay the losses we have been paying year after year after year. Anyone in the private sector that tried to do this and call it insurance would be out of business after the first year.

What I have asked the industry to do, the insurance industry, is to come up with some suggestions on how to change this. I do not think we can afford this any longer. It is a program which has cost us $2.6 billion over the last 10 or 12 years. It continues to show dramatic losses year in and year out.

At the direction of Congress, we write insurance on crops which will never be profitable and we marvel at the fact that people come in each year and say they did not make it again this year, and we pay them again.

There are some loss ratios, as you are well aware, with some crops in some states that are just disgraceful and would suggest that they never should have been insured in the first place or, if

you charged the necessary premium, no one would buy the insurance.

Do you disagree with that?

Mr. MAURICE. That is correct, sir.

Mr. DURBIN. Thank you.

Mr. Skeen.

Mr. SKEEN. You disagree, Mr. Maurice, but then you offered some solutions to this problem and I know from the outset that this was a program that held a lot of promise. From my perspective I had always envisioned that we could get away from disaster payments and get the private sector more involved. However, I think we grew much too fast without the actuarial backing.

Is there any way to save this program, in your mind, or do you think the private sector is accepting enough of the risk involvement? Should we narrow it down?

And I think that you mentioned the difference between a one-product and a two-product solution. Could you embellish on that a little more?

Mr. MAURICE. Thank you, sir.

Although I agree with the ending part of your statement, Mr. Chairman, there is a lot of good that has happened in FCIC. If we look at only the big picture, we do not see the successes of the small pictures.

Congressman Skeen, you mentioned the participation of the private sector and their picking up risk. FCIC has taken its products and it has broken them up into three categories: those that should be commercially insurable and those that are really far away from being there and then a middle category.

We take risk on 72 percent, I believe, this year of the stuff in the commercial category. And that stuff is tending to break even, tending to do fairly well. The stuff in the least commercial category, we are taking risk on 9 percent of that. We are tending to lose on that every year. We make up with a profit from the good stuff to cover the bad stuff.

Overall, when you look at the whole program, we have consistently that problem that is difficult for everybody, for yourselves and us, but we have brought in the private sector, we have expanded the program, there are more farmers, there are more dollars of premium being paid by farmers and that part works.

Mr. Chairman, you mentioned the difficulty of a program that is losing money year after year but there are some economies in this program that are extremely powerful and the most powerful one is the impact on the credit system.

The crop insurance program does make it possible for a lot of farmers to qualify for loans that they would not qualify for otherwise. Those farmers would have to move over to Farmers Home Administration and the costs, significant costs, would be borne by the government if the program was not there.

So part of the program's cost should be thought of properly as a leveraging of private credit to support these farmers.

Mr. Skeen, you mentioned the private sector's involvement. We come to these meetings and we talk about the federal crop insurance program but there are some other crop insurance programs that are not mentioned. Of course, we have been doing as a private

industry, America has had a Crop Hail program for over 100 years, I am not sure quite how old. But in the last five years we have begun what we call a named peril program and basically we are riding on the FCIC program.

As you folks have allowed us to come into this industry and learn about a lot more risk and a lot of different ways to handle crops, we have gone out and we have begun insuring other things. Our company this year is going to be offering insurance on cucumbers and sweet potatoes and snap beans and just a whole bunch of things we would not have thought of doing five years ago.

I estimate that the private industry is going to be doing somewhere between 15 and 20 million dollars of premium this year, this is still a drop in the bucket but we are new moving into this area.

None of this appears on the federal ledger because it is an entirely private activity and like the gentleman who preceded me, where the government is trying to promote private sector activity, the same thing has been happening, it has been happening automatically.

Mr. Chairman, before you came in the room, I was making an argument that we sabotaged this program in 1980 by giving it two missions but only one tool. We told them you have to offer a risk management product and you have to also get participation up high enough to make disaster unnecessary and that tied the hands of FCIC, they could not be as tight in their underwriting as they should have, that would have driven people out and hurt the participation objective.

I made an argument that we need two products in FCIC, a two-product strategy. And the reason for doing that is I think it brings home very significant savings for the program. If we have two sets of products, MPCI for farmers who need risk management and a basic crop insurance tool for farmers who do not really need it, who just need the disaster kind of assistance. Then FCIC is in a position to evolve towards the kind of underwriting results you want to see where the losses are less than the premium. Most years and only a few years does it blow up. So I think you can save on excess losses.

Also I think that as you do that what happens is farmers move from one program to the other and you are going to save on administrative expenses. And I think that if you can keep the private ag lenders involved, you are going to avoid a huge expense that will come home to the government lending agencies.

Mr. SKEEN. Thank you, Mr. Maurice.

Thank you, Mr. Chairman.

Mr. DURBIN. Ms. Kaptur?

Ms. KAPTUR. I have no questions, Mr. Chairman.

Mr. DURBIN. Mr. Peterson?

Mr. PETERSON. Thank you, Mr. Maurice, for joining us and I will read your testimony more closely. I am sorry I was not here when you testified.

[The information follows:]

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Testimony of

Nelson Maurice, Underwriting Manager, Continental Insurance Companies
on behalf of the

Crop Insurance Research Bureau, Inc.

Before the House Appropriations Subcommittee on
Agriculture, Rural Development, Food and Drug Administration,
and Related Agencies

Regarding the Federal Crop Insurance Program

March 30, 1993

On behalf of the Crop Insurance Research Bureau, Inc., (CIRB) a national trade association representing 38 companies providing multiple peril crop insurance and crop hail to the nation's farmers, I appreciate the opportunity to share with the Committee our views on the future direction of the Federal Crop Insurance Program.

I FARMERS

As Congress reviews the performance of the Federal Crop Insurance Program to assure that the FCIC's mission and the government's overall goals and budgetary constraints are in accord, we ask that careful consideration be given to the needs of farmers and the importance of a healthy agricultural sector to our nation's economy. The importance of crop insurance to agricultural lenders and borrowers should not be overlooked.

II RISK MANAGEMENT VS AD HOC DISASTER ASSISTANCE

Before major structural changes are made to the current program, it is important to differentiate between risk-management programs, such as FCIC's multiple peril crop insurance (MPCI) and disaster relief programs, such as those enacted by Congress in recent years. If Congress and the Administration do not clearly differentiate between the two, they run the risk of causing farmers great harm when they propose dramatic changes to the FCIC program. Here is a brief description of the two:

Risk Management Program

A true risk management program provides **protection before losses occur.** It guarantees that the farmer will be able to pay expenses, either with crop sale proceeds or crop insurance benefits. It also guarantees repayment to lenders from either of these two sources.

Producers who desire the assistance of a risk management program buy crop insurance. Some very large producers who have other assets (cash) to cover their potential crop losses may not need it and tend not to buy it. Conversely, some small producers with off-farm income that covers potential losses do not believe they need it and tend not to buy it.

Ad Hoc Disaster Relief Program

A disaster relief program provides **protection after losses occur.** There are no guarantees. If losses occur in a general area and if there is enough political interest, ad hoc disaster legislation tends to be enacted. These disaster programs do not provide -- either to farmers or lenders -- the guarantees necessary to finance a crop.

Disaster benefits are provided to anyone who has a loss in a given geographical area, **whether needed or not.** Those with sufficient assets, (cash or jobs) who decided not to purchase crop insurance, get disaster benefits just as surely as those who truly need it. It is not "means tested."

III FCIC AND THE ONE PRODUCT TRAP

Discussions of the FCIC invariably focus on two problems:

- Since 1980, the loss ratios have exceeded 100% each year, although they have been steadily decreasing since 1990; and
- Program participation is not high enough to eliminate the demand for frequent ad hoc disaster relief programs.

The cause of these two problems lies in the unintended trap that was set for FCIC in the Crop Insurance Act of 1980. The solution lies in understanding that trap.

From 1938 to 1980, FCIC had one mission and one product. The mission was to develop and provide a risk management product; the product was MPCI. By 1980, FCIC was just barely in the black with a long term loss ratio from 1948 to 1979 of 98%. The crop insurance mission could be achieved with a single product.

In 1980, a second goal was added to FCIC's mission statement -- make ad hoc disaster relief programs unnecessary. But, FCIC was never given the second product to accomplish the goal. This is the One Product Trap and it has prevented FCIC from doing its job properly.

FCIC did not have the freedom to tighten underwriting and rates (so as to avoid excess losses) because of the potential adverse impact on participation. At the same time,

it could not totally ignore the need for some underwriting discipline (which would boost participation) because of the adverse impact on losses.

The results of this One Product Trap are high losses and low participation.

IV TWO PRODUCT STRATEGY

The solution to the One Product Trap is the Two Product Strategy.

FCIC needs two products to do its job -- MPCI for farmers who desire the protection of a risk management product and BCI, a basic crop insurance program for farmers desiring only disaster protection.

As an example, consider one BCI product that FCIC now has in the experimental stage called the Group Risk Plan (GRP). GRP was made possible through the 1990 Amendments to the FCIC Act which authorized the use of crop insurance programs based upon the area-loss concept. The GRP covers soybeans in 96 counties in 13 states. It is not designed to replace MPCI because it is not a risk management tool, but it can satisfy the demand for disaster protection. It is inexpensive and simple enough that farmers are likely to use it.

FCIC needs both time and Congressional support to develop additional BCI products such as GRP. The experiments must be run, data must be collected and analyzed. These products will not be appropriate for all farmers. FCIC must determine when and where to use these products and how to adjust their design.

V POSSIBLE BCI PRODUCTS

What are some BCI candidates? Perhaps there should be only one, perhaps several. Some of the candidates that have been proposed for the role of BCI are listed in the Table below, and then described in greater detail.

Possible Basic Crop Insurance (BCI) Products

Product:	Would Pay:
Area-Loss Ins. (e.g. - GRP)	100% of the short-fall when the country average yield is less than X%
Basic 35	100% of the short-fall when the farmer's yield is less than 35%
30 On The Side	30% of the short-fall when the farmer's yield is less than 65%

A. **AREA LOSS:** All participating farmers would be paid if the county had a loss; conversely, none would be paid if the county as a whole did not suffer a loss. An unavoidable problem with this program is that sometimes, farmers who have suffered no loss could get paid. (The ongoing GRP test will measure the extent of this problem.) The area loss program does **not** provide an adequate guarantee for agricultural credit, because farmers will sometimes have losses that are not paid. This program will not work for specialty crops, where it is extremely difficult to measure area results. However, it can work well with certain crops that MPCI does not handle well, such as forage, Delta soybeans and high-plains wheat.

B. **BASIC 35:** This proposal would use the current subsidies to provide MPCI at the 35% coverage level free to any farmer who signed up. To save on costs, insurance units might not be available (*ie.*, the insurance would be on a whole farm basis). In addition, the paperwork for establishing the guaranteed yield (APH) might only be performed when there was a loss. Legislation would be required to implement this program.

C. **30 ON THE SIDE:** This is a variation of the Basic 35 proposal. Under this program, the subsidy is used to purchase 30% of a 65% coverage MPCI policy. (An attachment point lower than 65% might be considered.) The farmer would be paid at the rate of 30 cents on the dollar once the loss threshold was reached. The price per bushel (or other unit of measure) would be 30% of the FCIC maximum. For example, corn would have a price of $0.69/bushel, which FCIC will insure this year for $2.30/bushel. If farmers wanted a higher price, more coverage or additional units, they could switch to MPCI. The sign-up requirements, units and APH would be the same as for Basic 35. With both products, the existing premium subsidy is used to buy a portion of MPCI -- either off the bottom or off the side. Legislation would be required to implement this proposal.

VI COST SAVINGS FROM A TWO PRODUCT STRATEGY

This is an extraordinarily difficult time for the United States. The federal budget deficit must be cut, the national debt must be reduced, but the economy cannot be allowed to slip into a recession. We believe that the Two Product Strategy outlined earlier can help, both by generating current budget savings and by providing FCIC with the support to assist farmers and agricultural lenders.

In order to implement the Two Product Strategy, FCIC will require adequate budgetary support, but this approach will generate real savings to offset that expense. These savings will come from the following areas:

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A. **SAVINGS FROM DECREASED LOSSES:** The availability of two products will allow the FCIC to improve underwriting results. FCIC will not have to worry about reduced participation, because farmers who decide not to purchase MPCI will still have access to a BCI product.

B. **ADMINISTRATIVE COST SAVINGS:** By its very nature, MPCI is more expensive to administer than disaster programs. With MPCI, the guarantee level must be set and the loss measured with greater precision. Administrative savings will be realized when individual farmers switch from MPCI to a BCI product. Additional savings will be realized when FCIC withdraws MPCI from certain inappropriate crops and counties.

C. **NATIONAL DEBT SAVINGS:** The regular, off-budget expense of disaster programs will be eliminated. Although this has no effect on the current federal budget deficit, it does have a very real and direct impact on the long term national debt.

D. **AN EXPENSE AVOIDED:** The Two Product Strategy avoids the error of abolishing MPCI and attempting to replace it with a single BCI product -- an approach we believe would be disastrous to both the American farmer and the agricultural credit system. Such a move could cause a large number of privately-financed farmers to be moved to the Farmers Home Administration (FmHA). Any savings realized by the elimination of MPCI would be dwarfed by the staggering cost to the federal government of dramatically increasing the FmHA portfolio and the subsequent write-offs of bad debts.

VII RECOMMENDATIONS

A. Provide FCIC with the authority to develop and offer one or more Basic Crop Insurance (BCI) products to complement the MPCI program;

B. If necessary, amend existing law to suspend automatic disaster program declarations to include BCI as well as MPCI;

C. Adequately fund the FCIC so that the agency is able to carry out its dual missions of providing agricultural risk management products and obviating the need for ad hoc disaster relief programs.

CENTER FOR RESEARCH ON HUMAN NUTRITION AND CHRONIC DISEASE PREVENTION, BOWMAN GRAY SCHOOL OF MEDICINE

WITNESSES

HON. WILLIAM G. HEFNER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

HON. DAVID E. PRICE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF STATE OF NORTH CAROLINA

HON. STEPHEN L. NEAL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. DURBIN. We have three Members here from one of the final four states, not Kansas, Kentucky or Michigan.

I would like to welcome the Honorable Stephen Neal, the Honorable William G. Hefner and the Honorable David Price to the table on behalf of Wake Forest University's Bowman Gray School of Medicine.

I guess I do not need to ask who you are rooting for.

Mr. HEFNER. It makes no difference to me. [Laughter.]

Mr. DURBIN. Your statements will be made part of the record and you may proceed, as you have instructed witnesses before your committee.

Mr. NEAL. Thank you, Mr. Chairman, very much. I thank all of you for giving us this opportunity to testify in support of the Center for Research on Human Nutrition and Chronic Disease Prevention under construction at Wake Forest University's Bowman Gray School of Medicine.

I greatly appreciate the great support we have gotten from our colleagues Mr. Hefner and Mr. Price and I will be delivering a statement on behalf of all three of us.

We appreciate the strong support the subcommittee has shown for this project over the past four years.

Construction of the nutrition center is moving along on schedule and the nine-story steel superstructure will be completed over the next several months. The medical school estimates that it will need $21.9 million in fiscal year 1994 to finish the exterior work and to begin the major interior work involving the heating, plumbing and air conditioning.

Mr. Chairman, it is absolutely essential that this work be completed expeditiously to maintain the structural integrity of the building and keep construction on the most cost efficient schedule.

As you know, the Agriculture Department is the lead federal agency in the area of nutrition. Through WIC, school lunch, food stamps and other programs, the USDA attempts to ensure that healthy, nutritious food is available to the people of our country. USDA nutrition centers provide research support for many of these programs. The Bowman Gray Center will provide the Agriculture Department with essential information regarding the prevention of diseases whose causes can be traced to nutritional deficiencies or excesses.

Heart disease, cancer and stroke are the top three killers in our country. We know that each of these diseases is in some way con-

nected to diet. Some experts say that up to 35 percent of these diseases could be prevented through proper nutrition.

If we could find ways to prevent these and other chronic diseases through proper nutrition, we could end needless human suffering and save billions of dollars in treatment costs. For example, estimates show that diet related cardiovascular diseases cost our country more than $135 billion annually.

At the Bowman Gray Nutrition Center, researchers will not only determine the links between nutrition and chronic disease but they will also educate food producers and the general public in the use of this information for promoting good health.

Bowman Gray has major research programs in arteriosclerosis, cerebral vascular disease and cancer. Research on the links between nutrition and disease prevention will build on efforts already underway at the medical school. The research program for the nutrition center is being rapidly developed under the guidance of a group of nationally recognized scientific advisors from across the country. These advisors have helped the university and medical school identify important areas of research that are not currently being pursued by other research institutions.

Mr. Chairman, we appreciate how difficult it will be for you and your subcommittee members to allocate scarce resources to many important programs and projects. I respectfully urge that you give special consideration to projects like this nutrition center that are already under construction and struggling to meet tight construction schedules.

In addition, in these times of tight budgets, it is essential that we fund projects that will give us significant returns on our investments. The Bowman Gray Nutrition Center is just such a project. It will pay for itself many times over in reduced health care costs, diminished human suffering and a healthier population.

Once completed, the nutrition center will permanently employ 450 researchers, assistants and technicians. It will contribute greatly to economic growth and diversification in North Carolina.

Thank you once again for the support this subcommittee has given this project in the past.

I have with me a statement from Dr. Richard Janeway, Executive Dean of the Wake Forest University's Bowman Gray School of Medicine that I would like to submit for the record.

Mr. Chairman, I appreciate very much your letting us appear and I would be happy to try to answer any questions.

Mr. DURBIN. Thank you, Congressman Neal. The statement will be included in the record.

Congressman Hefner?

Mr. HEFNER. Thank you, Mr. Chairman. And the entire statement will be part of the record on behalf of Mr. Price and Mr. Neal and myself, so I just want to echo my thanks to this committee for Mr. Whitten, when he was chairman, and you, Mr. Chairman, Mr. Durbin as chairman now.

And as we all know, if you have been watching the hearings on the national health insurance or whatever you want to refer to it as, there are going to be a lot of approaches to this and the long-term prospects, it is going to take a lot of research and it is going to take a lot of working together to come up with something to see

that all Americans have adequate health care. And I think this is just one of the ways that we can go, that we can prevent an awful lot of our illnesses before they become major. Certainly heart and cancer. And we know that research has helped us in a lot of areas. We know how effective the WIC program has been.

So I am just basically here to urge you to help us with the funding for this $21 million because it is very vital. We have construction that is out of the ground.—The Bowman Gray Research Center will be—one of the most prestigious in the United States.

So the folks have worked very, very hard. They are very dedicated people and I want to thank you again for all the help that you have been in the past and we are looking forward to the help that you are going to give us in the future.

Thank you for letting us come and testify before your committee.

Mr. DURBIN. Thank you, Mr. Hefner.

Mr. Price.

Mr. PRICE. Thank you, Mr. Chairman.

As a former member of this subcommittee, I want to say how glad I am to be back and also say that I am very much aware of the many demands on limited funds that you are facing. You do have a tough job, especially in allocating funding in this Cooperative State Research Service buildings and facilities account.

At the same time, it is true that the largest expenditures in the agriculture appropriations bill are in the nutrition area. Sometimes people do not fully realize the extent of that national investment and the critical role of this subcommittee in underwriting that investment.

We have an important mission to fulfill in agricultural and nutrition research and this first rate program at this first rate facility, the Bowman Gray School of Medicine, is very much in line with that mission. This subcommittee has supported it in the past and I urge you to see it through.

Bowman Gray's work combines the priorities of the subcommittee, first rate research, and support for our nation's nutrition effort. It is an effort that is proven. With research already underway. The construction is well advanced. And so what we need is the funding to finish the job, and I urge you to fund this project as generously as you possibly can given the constraints we are operating under because it is an excellent project and one that I am proud with my colleagues here to fully support.

Mr. DURBIN. Thank you.

Congressman Neal, is it my understanding that this is a turnkey operation where ultimately after construction the federal responsibility will end and it will be taken over by the university and the state of North Carolina?

Mr. NEAL. Yes, sir. That is absolutely correct.

Mr. DURBIN. I might just say to my colleagues, this is a wonderful booklet that you handed out. It is not fair to call it a booklet but it really tells the story in detail.

We need your help on this subcommittee. As soon as we come to the floor with this appropriation bill there will be a gaggle of critics on the floor when it comes to ag research. They have already spoken through groups, self-anointed groups like the Pork Busters who have announced that the nation is investing entirely too much

money in ag research. The record will indicate we spend $1.1 billion a year on agricultural research. The Pentagon folks lose that over the breakfast table.

No offense meant, I know your subcommittee chairman is keeping a good eye on it. I know he is keeping a good eye on it, I wish others would as well.

But we have really got to make our case here and when it comes to earmarked projects like this one which have sound scientific backing, I need your help in making the case on the floor before our colleagues about the importance of this project and the fact that it is not being presented to them lightly, that a lot of thought has gone into this.

Mr. HEFNER. Mr. Chairman, if I may——

Mr. DURBIN. You may.

Mr. HEFNER. We are already—I personally have been involved in some groundwork, preliminary groundwork, along these lines to see that maybe it can pave the way for some amicable solutions to these problems that will not be as much of a burr under our saddle as we have had before.

And I think that once the people understand—I think this is a very defensible project, I think it is something that most clear thinking people would say is a good investment for the future of America and certainly in these times when we are talking about health care of Americans, when people are so concerned.

So I can assure you that I personally will do everything that I can to smooth the way for you when you bring this bill to the floor and will give you my full 100 percent support, as I always have.

Mr. DURBIN. Thank you, sir.

Mr. PRICE. And I will echo my own assurance along the same line.

Mr. DURBIN. You have been on the subcommittee and understand what we have faced in the past.

Mr. Skeen?

Mr. SKEEN. Thank you, Mr. Chairman.

I think the message has been delivered and I appreciate the work that you folks have done. This is a project that is underway.

Will this finish the project?

Mr. NEAL. No, sir. This would not finish it. This will keep it on schedule.

Mr. SKEEN. It will keep us on schedule?

Mr. NEAL. The total project cost is $58 million. I think that if we were to appropriate the full amount we ask for this year we would still need another—I do not have the exact figure—20 million or something like that.

Mr. HEFNER. Twenty-one-nine.

Mr. NEAL. Twenty one million, nine hundred and twenty-five thousand.

Mr. HEFNER. I might add that the matching monies from USDA has already been okayed, they have reconciled that these matching funds have already been met so there is no problem there. So when this money has reached this number, it will be turned over and the Bowman Gray facility will take full charge and there will be no further government involvement. Unless there would be some

projects that would be government projects that would take place after it became functional.

Mr. SKEEN. Well, the reason I asked the question is the drift of the conversation seemed to be that we were getting close to winding it up. That is what I am interested in because I know how tough it is and I share the chairman's concern for the propagation of these projects. We get them started and we run into tough times. This is one that I do not think should be left by the wayside.

How much cooperation money are you getting from the state?

Mr. HEFNER. From the state?

Mr. SKEEN. Yes.

Mr. HEFNER. Well, the way I understand it, the matching money from the Bowman Gray has already been okayed from the USDA, so the matching money is already there. This is federal money that goes into this project. So they have already met the requirements for the matching money at the university.

Mr. SKEEN. At the university.

Mr. NEAL. Bowman Gray has spent more than $72 million in research and clinical facilities related directly to the school proposed nutrition disease prevention research to be conducted at the center. And then as Chairman Durbin pointed out, once this project is constructed, the university and state funds will fund it.

Mr. SKEEN. They will fund it.

Mr. NEAL. There will be no—we are not asking for any federal funds as ongoing operating support.

Mr. SKEEN. I understand.

Thank you very much. I appreciate the fact that we have such staunch supporters when we go to the floor with this bill.

Thank you, Mr. Chairman.

Mr. DURBIN. Ms. Kaptur?

Ms. KAPTUR. I have no questions, Mr. Chairman. I will do my best to assure the completion of this project. I know the level of competence we have sitting before us so I think the state of North Carolina certainly has adequate representation and we look forward to helping you.

Mr. NEAL. Thank you, ma'am.

And, Mr. Chairman, I will be glad to try to help you, too. I think you all do important work with this subcommittee. This is just one small part of it and it is a privilege to support what you do.

Mr. DURBIN. Thank you very much.

Mr. HEFNER. Thank you.

Mr. PRICE. Thank you.

[The information follows:]

STATEMENT OF
CONGRESSMAN STEVE NEAL
CONGRESSMAN BILL HEFNER
and
CONGRESSMAN DAVID PRICE

before the

SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE,
AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES
MARCH 30, 1993

Mr. Chairman, members of the subcommittee, thank you for giving us this opportunity to testify in support of the Center for Research on Human Nutrition and Chronic Disease Prevention under construction at Wake Forest University's Bowman Gray School of Medicine. We appreciate the strong support this Subcommittee has shown for the project over the past four years. We are also encouraged by the support we received last year in the Senate.

Construction of the nutrition center is moving along on schedule, and the nine-story steel superstructure will be completed over the next several months. At that time, the medical school will need additional funding to finish the exterior work and to begin the major interior work involving the heating, plumbing and air conditioning. The medical school estimates that an appropriation of $21.925 million for fiscal year 1994 would allow them to complete this work on schedule. Mr. Chairman, it is absolutely essential that this work be completed expeditiously to maintain the structural integrity of the building and keep construction on the most cost-efficient schedule.

The construction plans and funding requirements for the nutrition center are detailed in the testimony we are submitting on behalf of the Bowman Gray School of Medicine. These plans have been thoroughly reviewed by the technical staff at the Cooperative State Research Service, and the medical school has been complimented for the highly professional manner in which it is managing this project.

As you know, the Agriculture Department is the lead federal agency in the area of nutrition. Mr. Chairman, we are excited about the ways in which this project will advance the Department's nutrition research mission and help us achieve our nation's health goals. Through programs like WIC, school lunch, food stamps, the extension service's nutrition education and food consumption surveys, the USDA attempts to ensure that healthy, nutritious food is available to the people of our country. USDA nutrition centers provide research support for many of these programs. The Bowman Gray center will provide the Agriculture Department with essential information regarding the prevention of diseases whose causes can be traced to nutritional deficiencies or excesses.

Heart disease, cancer and stroke are the top three killers in our country. We know that each of these diseases is in some way connected to diet. Some experts say that up to 35% of these diseases could be prevented through proper nutrition. If we could find ways to prevent these and other chronic diseases through proper nutrition, we could end needless human suffering and save billions of dollars in treatment costs. For example, estimates show that diet-related cardiovascular diseases cost our country more than $135 billion annually. At the Bowman Gray nutrition center, researchers will not only determine the links between nutrition and chronic disease but they will also educate food producers and the general public in the use of this information for promoting good health.

Wake Forest University's Bowman Gray School of Medicine is uniquely qualified to discover the exact links between nutrition and chronic diseases. Bowman Gray has major research programs in arteriosclerosis, cerebrovascular diseases and cancer. Research on the links between nutrition and disease prevention will build on efforts already underway at the medical school. The school's existing expertise in cancer, stroke and heart disease will contribute greatly to research efforts at the nutrition center.

The research program for the nutrition center is being rapidly developed under the guidance of a group of nationally recognized scientific advisors from across the country. These advisors have helped the university and medical school identify important areas of research that are not currently being pursued by other research institutions.

As you may be aware, the incidence of heart disease, stroke, cancer and other devastating chronic diseases is higher in the southeastern United States than in other regions of the country. Although nutrition is closely linked to these diseases, no existing USDA nutrition center is located in the southeast. The Bowman Gray nutrition center will correct this problem and ensure that important research opportunities in the region are not overlooked.

Mr. Chairman, we appreciate how difficult it will be for this subcommittee to allocate scarce resources to many important programs and projects. We urge you to give special consideration to projects, like the nutrition center, that are already under construction and struggling to meet tight construction schedules. In addition, in these times of tight federal budgets, it is essential that we fund projects that will give us significant returns on our investments. The Bowman Gray nutrition center is just such a project. It will pay for itself many times over in reduced health care costs, diminished human suffering and a healthier population. Once completed, the nutrition center will

permanently employ 450 researchers, assistants and technicians. It will contribute greatly to economic growth and diversification in North Carolina.

Thanks, once again, for the support this Subcommittee has given this project in the past. We would be glad to answer any questions you may have.

Statement of Richard Janeway, M.D.
Executive Vice President for Health Affairs and Executive Dean
The Bowman Gray School of Medicine of Wake Forest University
Before the
Subcommittee on Rural Development, Agriculture and Related Agencies
Committee on Appropriations
U.S. House of Representatives

Mr. Chairman, members of the Committee, I am pleased to have the opportunity to report on the progress we are making to establish the Center for Research on Human Nutrition and Chronic Disease Prevention. As the result of this Committee's strong support over the past four years, the physical structure of the Center is rising in the midst of our medical center complex. It is indeed exciting to see this project, to which so many important resources have been devoted, becoming a reality.

We are extremely pleased with our relationship with the project managers in the Department of Agriculture who have worked closely with us to ensure that this project is being managed in the most cost effective fashion. We have every intention of completing this project on schedule and within budget.

Exciting as it is to see the construction taking place, it is even more exciting for us to see how our scientific program is developing. I don't think it is too much of an exaggeration to say that our medical staff and researchers are approaching this opportunity with the same enthusiasm and determination that drove President John F. Kennedy to inspire our nation to put a man on the moon. And, indeed, in terms of the potential for improving the health of the American people is concerned, its potential is certainly no less.

Human nutrition research is an area in which the Department of Agriculture has always played a leading role, because of its primary position as the handmaiden of the nation's food

supply. Some of the most historic discoveries in the field of nutrition, involving vitamins, minerals and trace metals, have come about as a result of the Department's research.

In more recent years, the Department has expanded its role by building and operating nutrition centers in various regions of the country. It has also provided support for these and other extramural centers. We, unlike the other centers, request only financing for construction. The Bowman Gray Center will be the first in the Southeast. We intend to focus our research on problems of particular importance to the population in our area, but at the same time, we will be serving the interests of the entire U. S. population.

We are focusing on the prevention of chronic disease through nutritional and dietary intervention. Historically, chronic diseases have been a primary focus of our research program, including heart disease, stroke and cancer. Dietary factors are believed to contribute significantly to many of these diseases that may begin in childhood, develop through adolescence and middle age, and often dramatically shorten lives. The Department of Agriculture is in a unique position to intervene in this area of maintaining optimal health through its production and nutrition research, its food consumption surveys and its major family and institutional feeding programs.

Bowman Gray is part of Wake Forest University. With the North Carolina Baptist Hospital, the School comprises a major academic medical center. In this sense, we are similar to the nutrition research centers at Tufts University and Baylor College of Medicine. Ninety-eight percent of our patients come from the southeastern United States which has higher incidence and death rates for heart disease, strokes and kidney failures than any other region of the nation. Forty-seven percent of our patients come to be treated for chronic diseases.

One significant way in which Bowman Gray differs from Tufts and Baylor, as well as other USDA Centers, is that we are a major outreach center to much of rural northwestern North Carolina and southwestern Virginia. We provide education, staff clinics and bring the latest in clinical trials and treatment to these rural areas. We believe these services enhance

significantly the quality of life in rural North Carolina and that the Nutrition Center will allow us to do even more.

Mr. Chairman, I would like to submit for the record our latest complete project description which gives more detail of our construction schedule, research effort, education program, collaborations and other activities. We would be happy to respond to any questions that you, other members of the committee, or staff might have about the project.

CROP INSURANCE PROGRAM

WITNESSES

JOHN JOYCE, AMERICAN ASSOCIATION OF CROP INSURERS
WILLIAM McDONALD, ARERICAN ASSOCIATION OF CROP INSURERS
MICHAEL McLEOD, AMERICAN ASSOCIATION OF CROP INSURERS

Mr. DURBIN. From the American Association of Crop Insurers, William McDonald, Gene Gantz and Mike McLeod.

Welcome to the table.

I notice each group's statement on crop insurance is getting thicker. We will try to keep up with you.

Your statement in its entirety will be made part of the record. Who is going to be the spokesman?

Mr. MCDONALD. Mr. Chairman, I am Bill McDonald. On my far right is Mike McLeod, our executive director, and Gene Gantz is right next to me. John Joyce was scheduled to give the testimony. I think you know Mr. Joyce.

Mr. Skeen, I know you do.

His mother passed away over the weekend so Gene is substituting and giving his testimony. Mike and I will remain here for questions.

Mr. GANTZ. Thank you, Mr. Chairman.

It is a privilege to appear before your committee and we want to thank you for the opportunity to share our views on the 1994 funding for the Federal Multi-Peril Crop Insurance Program and its future direction.

The views are expressed today on behalf of the American Association of Crop Insurers. It is a voluntary membership trade association of the private insurance industry. Our association consists of insurance companies, private reinsurers, local crop insurance agents and local independent adjusters. Our membership is varied in that they write the majority of the multiple-peril crop insurance protection, company size varying from $149 million in premium in 1992 to less than $8 million in premium.

We support full funding for the continued improvement of the program for one purpose and that is because farmers need it. However, we realize the pressures that this committee is under to reduce the budget and we also would like to comment with regard to the president's proposal to replace the current program with a group risk plan.

On that subject, we believe that we can demonstrate that adjustments in the current program can get the necessary savings and would make the end result still very superior on the farm as compared to the proposed group risk plan.

Our testimony today, and we are going to keep it very brief, but we want to focus on—to show the committee that crop insurance delivered by the private sector, we believe, is the best disaster protection for farmers. It is important for them to collateralize their operating loans.

We want to show how crop insurance has improved and how private companies are assuming real risk, real financial risks in the program.

We want to demonstrate how crop insurance is a rural development program creating jobs and fostering economic activity in rural America.

We want to focus on providing ideas on how to better achieve program savings while still keeping an individual farm risk management program in place.

And what I am going to do in the interests of time is reference the exhibits which are in the back of the package and I think speak from those, just highlight a number of those.

The first exhibit deals with the makeup of the farms of this country and what some research has indicated the needs of various farms are.

The next two exhibits deal with cost around the program and, of course, the crop insurance program is less cost that the other disaster type programs and Exhibit 3 points out the big difference in that first graph is the fact that farmers are paying a significant portion of the premium, an amount about equal to what the government is putting into the program and that gives the program more bang for the buck at times when federal dollars are very tight.

Exhibit 5 deals with the credit issue and this program is extremely important from this standpoint because about 75 percent of the operating loans are secured with crop insurance. The box at the bottom of the exhibit points out that crop insurance may be a lesser cost alternative than some of the other approaches, namely expanded FMHA loans.

Exhibit 6 deals with what is relatively a new use for crop insurance and that is how folks are using it with marketing tools to increase their profit margins in good years to develop kind of a revenue insurance plan that works for program crops and many non-program crops and we have reports from growers who tell us they have more than doubled their profit margin using this approach.

Exhibit 7 touches on a different angle of participation looking at what the participation is with Crop Hail and multi-peril which gives a little bit different picture than looking at multi-peril by itself.

Excess losses are important, as you mentioned earlier, and in Exhibit 8 we have tried to break down into segments the excess losses that occurred.

You will notice that there are three slices on that chart that deal with drought losses, two of them being individual occurrences and then the lingering drought in Montana that accounts for 69 percent of the excess losses.

Another problem that we believe has been corrected was a flaw in the southern soy bean program and the loss ratios to the right of that chart tend to point out the progress that has been made.

Skipping over to Exhibit 9, the private sector, we believe, helps to maximize the impact of federal dollars spent. The risk bearing delivery that we represent here today handles the program for about half of the cost of the other delivery that is mentioned in the top part of that exhibit and the bottom part of the exhibit deals with the validity of the expense reimbursement rate and we have made some comparison there, the first group of bars dealing with the performance under the FCIC reinsurance program and several

other comparisons that we thought may be of interest to the committee.

The question is what happens with the dollars that are provided under the expense reimbursement, which is really a part of premium, a producer premium subsidy, if we might look at that.

Exhibit 11 attempts to list the major categories of functions that the companies perform and Exhibit 12 deals with a flow chart of the funding roughly chronologically as it happened and you will notice that the monies that pass through FCIC, either appropriated or farmers premium, a portion of that finds its way to the companies in expense reimbursement. That then goes to individuals throughout rural America, basically, who help administer this program.

Job-wise, we estimate that approximately 45,000 jobs are involved across rural America, either in the form of permanent, part-time, contractor status or whatever. Through these jobs flows the bulk of the $200 million of expense monies that currently go into the program.

Another important aspect of the program is the risk borne by companies and here we think progress has been made in the way FCIC is—the agreements they are putting forward. On Exhibit 10, you will see a comparison of the treaties that were actually in place across the years and the 1993 treaty applied retroactively.

You will see that the upper and lower bounds on risk in the early years was about plus five to minus two and now the current treaty is about plus 11 to minus 15. So we think progress has been made there as far as increased risk bearing.

The bottom chart kind of shows the maximums that companies are exposed to and if you trend that, it is quite significant, not only in increased risk exposure but the relationship of down side risk to profit opportunities.

Moving on, we get to the most important part and that deals with what can be done to save costs in this program. Again, we recognize the committee has tremendous pressures this year and we attempted to start a process in Exhibit 13 that we would be glad to work with the committee and staff to develop further. But we have tried to identify four areas of changes that could be made that would realize cost savings.

The first area deals with allowing things that have already been put in place to work. The 1990 Farm Bill made some significant changes to the program as far as writing and so forth and that is what the group one activities deal with.

Group two activities deal with things that could be done administratively to save money that would make—neither one or two would have much impact on farmers at all.

Section three deals with some things that could be done in the higher loss ratio areas. Again, at this point, we have tried to avoid impacting growers where the program is basically getting the premiums and a good balance with premium and losses.

And then area four deals with items that would certainly have impact on growers, would impact farmer participation, and we would suggest that they be the last areas that would be impacted.

Just to touch on two of them, two of the items very quickly, under section one, one is allowing the 1991 to 1993 rate increases

to work without further change or with changes limited to fine tuning that is necessary.

An analysis was made on one of the companies, Exhibit 8–2 and 3, the color maps would be a by-product of this analysis. We found that by taking the 1993 rates and applying them retroactively to the most recent four years would reduce the excess losses by about 40 percent.

Now, again, this is one company's book, it represents about 20 percent of the total writings. We would recommend that FCIC apply this kind of analysis to the total book to see what that would do but we think that has significant potential.

Another area, item B under that, deals with the makeup of the current book and, again, when we look back over, if the current book had been in place in the past, the experience would be very, very different. In fact, we believe that this has the potential, based on the analysis of one company's book that we had access to, of reducing excess losses by 15 to 30 percent. So those two items clearly have some tremendous financial impact on reducing excess losses.

We move then to the tracking system which FCIC tells us—that is 1C. They tell us that is very close to going in place and we applaud that because that is very, very necessary to run the program more effectively.

In item number 2, A and B are two areas that deal totally with the administrative side of the house and we believe there are some opportunities there that would be worth considering.

I will not go on and belabor the points except to point out like I mentioned before, we would be more than happy to work with the appropriate people to develop these further and get them to a position where perhaps CBO or somebody could cost them out for the committee's benefit.

But I would like to conclude by looking at Exhibit 14 and just making the statement that here is a summary of progress that we think has happened in the program, that is real. Today's program is very, very different than what the program was just a few years ago. And we know that there is solid evidence that this program is working in many, many areas of the country. There are other areas we think that there are present authorities that could be utilized that would make it work even better. And conclude with the fact that one thing for certain, farmers need crop insurance in the 1990s more than ever before.

We would be willing to answer any questions that we can for the committee.

Mr. DURBIN. Thank you, Mr. Gantz. I especially appreciate your willingness to provide some ideas for the subcommittee when it comes to program changes. We may be faced with that responsibility in an effort to meet some budgetary requirements.

Let me ask a few questions, if I might.

I notice that when you get to Exhibit 13–2, program changes, in sections 3 and 4 you do not have any estimated savings.

Mr. GANTZ. Yes. Frankly, Congressman, the reason for that is that we have—we did some analysis on the book of one company and we really think that we need FCIC's help in looking at the whole book of business and that is why we were reluctant to go too far in that area without having their help in doing that.

Mr. DURBIN. Your savings are estimated, I suppose, based on history and experience here, 1981 to 1992. Are you able to project what the impact would be in fiscal year 1994 and beyond?

Mr. GANTZ. Well, again, we think obviously when you do things like we did in 1–A where you actually take the rates that were in effect in 1993, go back to 1989, remove the 1989 rates, put the 1993 ones in, we think that is a pretty good test of how the rating has changed.

We would have liked to go back further. The ability to do that in the back years was quite difficult. However, we think that—you know, if this is important, I am sure it could be done. We felt it would be good to try to get USDA's help to do this on the whole book because that is where it is really meaningful. But since this is about 20 percent of that national book, we have reason to believe that it should be very representative.

Mr. DURBIN. Do some of your suggested program changes involve dropping coverage of certain crops in certain states or counties?

Mr. GANTZ. Actually, Congressman, we tried diligently to stay away from that because of the need farmers have for protection. You will note that in item number 3 we talk about adjusting coverage. In other words, if you are having high loss ratios, high excess losses, until you can find a solution, one way would be to throttle the coverage back some, still keep some coverage available so that that individual could get some operating capital, operating loans. But we basically took the position the last resort would be to deny coverage.

If I can take one step further, the Farm Bill, the 1990 Farm Bill, provided the authority for FCIC to give some catastrophe backing to initiatives by the private sector. We think that one of the problems in the problematic areas is the one size fits all approach. We think there are ways to offer coverage to those growers, it may look a little different than what it does in other places but there are a number of efforts that have been made on a pilot basis by the industry.

To date, FCIC has not exhibited any interest in exercising the authority of the 1990 Farm Bill and that is an area we are continuing to urge them to participate in. The company had a first dollar loss exposure so there is every reason to make the program work well. But we think that there are some possibilities there as well.

Mr. DURBIN. The reason I asked that question is obviously I have a printout here from the Federal Crop Insurance Corporation showing each state and each commodity and the state-by-state loss ratio from 1980 through 1992.

Some of these are embarrassing. We continue to write crop insurance on crops that should not be planted or, if they are going to be planted, should never be insured.

Mr. GANTZ. There are some of those.

Mr. DURBIN. And it just strikes me that it is time for us to be a little more honest. I am not pointing the finger at you because I know the reason these crops are in this list is at the direction of Congress. "Go ahead and insure it all."

But it is time for us to wake up. Some of this just cannot be justified. And I take it from what you are suggesting in proposed changes that you do not go to that policy level.

Mr. GANTZ. That would be the last resort because essentially the program has had approximately a 140 loss ratio over the period of years we generally reference.

If the sampling, the tests run on that one book of business are reflective of the national book, we think there is a great possibility that most of that 40 points of excess loss in excess of 100 could well be brought under control in the current program for most crops currently insured. And that would be our preference if the FCIC total book analysis would work consistently with that.

Mr. DURBIN. Well, we will have to try to work with you and see if there is a way that we can implement some of these things for some budgetary savings.

Let me move to one other element and that is the exposure of the private insurance company.

Now, it is my understanding that over the history of this program, at least since 1980, that in only one year have the private insurance companies had a loss and that was some $7 million back in 1988.

You have spoken in your testimony about the exposure of the companies. Can you tell me just what you mean by saying there is a risk to the private insurance company?

Mr. GANTZ. If 1988 happened under the current treaty, it is our estimate that company losses would have been in excess of $100 million.

In a market that is—capacity was very tight following Hurricane Andrew, Hurricane Iniki, recent storms, the experience of the Crop Hail the last four years which has not been good in most areas, that kind of exposure probably would mean there would be fewer companies writing the following year, if that happened any time soon.

Mr. DURBIN. That is understandable.

Mr. GANTZ. So it is insignificant.

Mr. DURBIN. But if I recall correctly, and I am trying to remember these numbers, in 1991, when the private companies were collecting close to $200 million, from the Federal Crop Insurance Program for writing and adjusting the policies, the Federal Government then saw an overall loss in the program of over $200 million. In 1991 a profit was then announced for the private companies, despite this overall loss in the program and I believe the profit was in the neighborhood of $50 million. Those figures, I think, are pretty close. I may correct them for the record.

But can you tell me, was the reform in place at that point?

Mr. GANTZ. Not the kind of reform that is there today.

Mr. DURBIN. What would have been the experience in 1991, had the reform been in place? Do you have any idea?

Mr. GANTZ. Yes. On Exhibit 10–1, the bottom part of that shows exposure. If you—1991 we do not have on that graph but essentially you have the exposure on the lower graph that shows the down side risk maximum of 35 percent of the premium exposed compared to a maximum underwriting on 19 and a half. You move that across to what the 1994 treaty says and you see that has expanded pretty dramatically.

I would simply say that that shows the trend of what would happen today with those same kind of situations.

The other point I would make, if you look at the graph at the top of 10–1, the underwriting gains over that whole period were 3 percent of premiums written. It is interesting to note that the current treaty is estimated at about 3 percent of premiums written across time but the peaks and valleys are different, as you can see from the dark bars compared to the hollow bars.

Now, a 3 percent underwriting gain is considered inadequate in most quarters of the insurance industry, so it is a pretty meager gain but at this point there is a service there that we want to provide and are willing to do that aggressively.

Now, as far as profits are concerned, Exhibit 10–2, we have tried to show how the FCIC book would likely be underwritten between the different funds. And this is not any one company's exact book but pretty standard underwriting approaches against the whole FCIC book.

And you will see that under current treaties, profits are not paid on a given book of business that FCIC is losing money on. If a company makes money when FCIC is losing money, it is how they had their business underwritten and the risk exposure and across funds that that would happen, not within a fund. And the commercial book of business there that accounts for in excess of 50 percent of the volume, companies typically take about 70 percent of the exposure on that business, so that is where the most dramatic risk taking is taking place.

Mr. DURBIN. Okay. We will take a closer look at this. There is a lot for us to consider.

Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman.

Thank you, gentlemen. It is a pleasure having you here and I think we are coming to grips with the problem of how you make this thing work. We have done about all the test phases that we can afford.

One of the accounts that the crop insurance program the subcommittee funds is the administration and operating expenses. We have had quite a discussion about the level of expense reimbursement which the private companies receive.

Would you give me some idea of what they receive and what it goes for?

Mr. GANTZ. Yes. Exhibit 9, Congressman, I think points out what we receive. The first four bars in that.

We are currently getting 32 and a half cents on the premium dollars that we write and that has been decreasing. And the comparison with some other lines are there on that exhibit.

Now, what it goes for, if I could, I would like to refer to Exhibit 12. And you will see that——

Mr. SKEEN. You sure keep us busy. [Laughter.]

Mr. GANTZ. Basically over half of it goes out to local agents as commission. And I would encourage you to talk to local agents in your territory but I think they will tell you that the compensation for the work required is not consistent with other products. Most of them are using it as something that they can offer along with their other coverages. There are some examples of folks specializing in crop insurance where there they would have some economies of scale.

But that is what the bulk of the expense end goes out for.

Mr. SKEEN. Well, is it true that the FCIC direct delivery system costs are greater than those of the private sector?

Mr. GANTZ. According to the Arthur Andersen study that they commissioned in 1990, which is referenced at the top of Exhibit 9, it shows about a two-to-one cost comparison.

Mr. SKEEN. Two-to-one?

Mr. GANTZ. Yes. In other words, the private sector is about half the cost of the delivery of FCIC policies under that study.

Mr. DURBIN. Excuse me. For what period of time was that?

Mr. GANTZ. That was looking back over a period of previous years. I cannot tell you the exact time. We could research that for you and provide it to you but it was several years.

Mr. SKEEN. Can we get a time-by-time cost comparison?

Mr. GANTZ. It was done in 1990 and we could get—the committee could have a copy of that. Yes.

Mr. SKEEN. That would be helpful.

Mr. GANTZ. Okay. Yes.

Mr. SKEEN. We have heard a lot of discussion and criticism of the one size fits all program. Have you folks got any suggestions about what it would take legislatively to fix this problem?

Are there existing authorities that we could use to handle the changes and transitions? How are we going to transition?

Mr. GANTZ. Congressman, I think the attitude of most of the members of the association are that there were rather far reaching authorities approved in the 1990 Farm Bill, that at this point FCIC has not been able to get implemented. We believe there is enough authority there now where they could help the companies manage the catastrophic risk, of taking programs that companies have developed and going into those areas where the current program is not working very well.

Mr. SKEEN. The high loss/low participation areas?

Mr. GANTZ. Yes. Yes.

Mr. SKEEN. Things of that nature?

Mr. GANTZ. Southern soybeans, if I may use that as a point, we know that there are good commercial growers in that area. The current program does not appeal to them very well but we believe they are there and we believe that that is something—I know a number of companies are anxious to develop and work into that area and now they will be able to be a lot more aggressive if FCIC is willing to implement the authorities that they were given in the 1990 Farm Bill.

Mr. SKEEN. So they have that flexibility.

Mr. GANTZ. We believe they do.

Mr. SKEEN. I notice on your list of budget saving options, your first two options indicate that it achieves significant program savings by just recalculating the baseline utilizing the current premium rates and the current policyholder characteristics.

Could you explain that basis on this particular point?

Mr. GANTZ. Well, essentially, we believe that the rates were increased to the effect that—and that was done primarily in 1991, 1992 and some in 1993.

Mr. SKEEN. One of those adjustment areas.

Mr. GANTZ. Yes. Again, the Farm Bill gave direction to move on that. We believe that that could reduce the excess losses by 20 points or more, so that could cut the excess losses about in half.

When you look at the current book, we suggest in the second item to look at the distribution of the current book. In other words, in some of the problematic programs where there were flaws, they have been fixed so they cannot reoccur again. Some areas, the problematic crop is not growing to any extent any more so you would not reinsure that again there. And we say we think if you look at the current situation and then say, well, if the current had happened, you had been in a situation, say, for the last five years, what would the losses likely be in that scenario, that is what we are getting at.

Mr. SKEEN. So you extrapolate them back.

Mr. GANTZ. Yes. That would be one way. That is probably easier mathematically than just guess ahead and I am sure that statisticians could call it better than that, have a better process.

Mr. SKEEN. Like the kiwi bird—it is better sometimes to fly backwards and see where you have been rather than where you are going.

Mr. GANTZ. I am sure there is a case where that is true.

Mr. SKEEN. Thank you, Mr. Chairman.

Thank you for your responses.

Mr. DURBIN. Does that bird have anything to do with that flea problem you have down in New Mexico? [Laughter.]

Mr. Myers?

Mr. MYERS. I apologize for getting here late. We have a lot of committee meetings these days.

Did I understand you a moment ago to say that your agents were not paid appropriately for the amount of workload that they have on these? Did I misunderstand you on that?

Mr. GANTZ. You did not misunderstand me. If you look at Exhibit—I believe it is Exhibit 9——

Mr. MYERS. Well, I was reading 12.

Mr. GANTZ. You will see that Arthur Andersen, when they did their study, they indicated that—at the bottom—the report noted that agents received MPCI commission rates that were 3 to 6 percent of premiums below the rates for other lines of insurance. That was Arthur Andersen's finding.

Mr. MYERS. Well, something has to be done, I think. I do not know what the answer to it is. Maybe we need a study commissioned. Maybe that is what we need. That is the way we always duck an issue, appoint a committee to examine it and we never hear from it again.

Mr. SKEEN. Trade secret.

Mr. MYERS. Yes. So I will have to digest this.

Mr. GANTZ. Congressman, Exhibit 13, I am not sure you were here when we covered that but there are some ideas there that we think could help achieve savings with minimal impact on growers and that would be our preference in approach.

Mr. MYERS. Okay. Well, I will read it.

Mr. GANTZ. And we would be more than happy to work with the committee and the staff to further develop those to the point where maybe CBO could do some costing on them.

There is a set of assumptions that there has to be agreement on as to how you would implement those to get the cost benefit.

Mr. MYERS. We have enough problems without having CBO in it. If you really want to mess it up—[laughter].

Thank you very much.

Mr. GANTZ. Thank you.

Mr. DURBIN. Thanks, Mr. Myers. I want to thank this panel for their testimony and we look forward to your recommendations.

[The information follows:]

Testimony of
John Joyce, William McDonald, Michael McLeod
American Association of Crop Insurers

Before the House Appropriations Subcommittee on
Agriculture, Rural Development, Food and Drug Administration and Related Agencies

Regarding the Federal Crop Insurance Program

March 30, 1993

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to present our views on the FY'94 funding of the federal multiple peril crop insurance program (MPCI) and on its future direction. These views are expressed on behalf of the American Association of Crop Insurers (AACI), a voluntary membership trade association of the private crop insurance industry. Our association consists of insurance companies, private reinsurers, local crop insurance agents and adjusters. AACI members write the majority of the MPCI protection for farmers in the U.S. -- our membership ranges from the largest writer, with $149 million in premium in 1992, to companies with less than $8 million in premium sales. We support full funding and continued improvement of the crop insurance program.

We realize the deficit reduction pressure Congress is facing, and we are well aware of President Clinton's proposal for converting the current MPCI program to one based on area yields. However, we believe, as do many farmers and ag lenders, that applying the area-yield plan nationwide would not provide farmers with an adequate risk management tool or the collateral required to obtain financing. Furthermore, the data is not available to implement nationally a group risk program for all of the crops currently insured.

Our testimony today is aimed at achieving several objectives. First, we aim to convince the committee that crop insurance delivered by the private sector is the best, most appropriate, most economical, and farmer-preferred means of providing farmers with disaster relief. Second, we want to point out how the program has improved over the past few years and how the private companies involved are shouldering more of the financial risk. Also, we want to demonstrate that the crop insurance program is a rural development program. Finally, we will provide you with a variety of options that could be considered in attempts to achieve various levels of budgetary savings.

Why Farmers Need Risk Management Tools in the 1990s

The remainder of the decade provides farmers with one certainty -- increased risk. Farmers will be exposed to: less income from government support programs; increasing weather variability; greater price volatility; changes in supply and demand brought about by trade agreements; and increasing environmental regulations that will impact both the ability to and costs of producing a crop. Thus, the predominant need of farmers who produce the majority of our food and fiber will be adequate risk management programs that work on an individual farm basis (Exhibit 1).

Crop Insurance is the Only Risk Management Tool and the Superior Disaster Relief Mechanism

Of the current government programs that provide relief to farmers in the event of a crop loss, only crop insurance provides farmers an opportunity to manage their risk up front and with the certainty that they will be protected in the event of a loss.

Crop Insurance Costs Less. Exhibit 2 shows that over the last 12 years the crop insurance

program has only cost $559 million annually while ad hoc disaster relief has cost $773 million a year and emergency loan write-offs have averaged over $1 billion a year. Furthermore, Exhibit 3 illustrates the relationship between benefits received by farmers versus the costs to the government of the various disaster relief programs. Crop insurance is the only alternative in which government outlays are leveraged -- the disaster relief received by farmers far exceeds the cost of the program. This exemplifies a principal element of crop insurance versus the other disaster programs -- farmers voluntarily share in the cost of the program. This and other qualities of the crop insurance program are what helped the General Accounting Office (GAO) previously determine crop insurance was the superior government-assisted risk management tool for crop farmers (Exhibit 4).

Crop Insurance Is Essential to Farm Credit. Crop insurance, unlike other relief programs, can be used as collateral, and in many cases is required, to secure operating loans. Crop insurance provides a means of showing the ability to pay back a loan in the event of an individual farm crop loss. Without it, lenders will not make loans or not make loans in amounts adequate to meet farmers' needs in many cases (Exhibit 5).

Crop Insurance Allows Farmers to Better Market Their Crops. An increasingly important aspect of crop insurance that makes it superior is its ability to provide farmers with greater marketing opportunities for their crops. President Clinton's economic proposal indicates that further cuts in government farm income supports are inevitable. In such an atmosphere, farmers must look for other means to secure crop prices above their cost of production. Crop insurance is increasingly filling that gap by providing farmers the ability to forward contract or otherwise aggressively market a larger portion of their crops -- up to the insurance production guarantee -- at times that market prices are higher (Exhibit 6).

We have statements from farmers that earned 20 to 45 cents more per bushel of corn this past year by using crop insurance and aggressive marketing techniques -- their premiums were paid by the market in a year when they didn't have a loss -- and they netted up to double their normal profit margin. We cannot ignore this existing policy tool which helps increase farm income without any additional government exposure and for which the farmer shares the cost.

Progress Has Been Made

The crop insurance program that more than 689,000 farmers are using today is much improved from a decade ago. As Exhibit 7 illustrates, farmer participation has nearly tripled since 1980. There are now 13 states in which multiple peril crop insurance (MPCI) coverage and private crop hail insurance coverage are in place on over 50% of the crop acres.

A major concern with the program has been the amount that losses exceed premiums, often referred to as excess losses. Exhibit 8 illustrates that the program's excess losses were primarily due to very volatile weather which caused major disasters in the 1980s and, to a lesser extent, program problems which are being addressed.

There has been significant progress, as testified to by FCIC, in the reduction of the claims handling error rate; farmers have more confidence in the program; and the loss ratio has improved from 146 (1981-90) to 125 (1989-92). Furthermore, one of our members who is a national writer of MPCI has done considerable analysis of their historical book of business which has indicated that if 1993 rates had been in effect starting in 1989, excess losses on their book would have been reduced approximately 40 percent and the loss ratio dropped from 137 to 119. Therefore, we

believe substantive progress has been made if we are patient enough to permit the current rates and the Food, Agriculture, Conservation and Trade Act of 1990 (FACT Act, P.L. 101-624) reforms to work.

Public/Private Partnership Maximizes Federal Dollar Impact

We also believe the delivery of crop insurance through the reinsured private sector insurance companies provides the most benefits to the government and to farmers. First, reinsured companies, as opposed to FCIC independent contractor deliverers, share in the underwriting risk of each policy written and in each dollar of indemnities paid to farmers. Second, various studies indicate that private companies can deliver crop insurance at approximately 50% of the cost of government delivery (Exhibit 9).

Third, the fact that approximately 91% of farmers now buy their insurance policies from local agents of reinsured companies like ours, when they could still buy directly from FCIC, indicates they prefer private companies because of the superior service they provide. Farmers would not be well served by a program delivered through ASCS. Local insurance agents can meet farmers at their kitchen tables to develop effective individual risk management plans. Compare this to a farmer packing up all his records and traveling miles to a consolidated government farm service agency to stand in line waiting for service.

Fourth, a strengthened public/private partnership provides the government with greater opportunities to save scarce taxpayer funds. Currently, the government performs many functions under the crop insurance program that duplicate private sector resources and capabilities. A streamlined FCIC could set program parameters, administer strong oversight and compliance, regulate the companies, and provide reinsurance. The private sector could then help design policies, conduct the underwriting to help reduce excess losses, deliver the product, and share in the risk.

Finally, the FACT Act gave FCIC the authority to approve and provide catastrophic risk management for private sector designed policies aimed at addressing MPCI problem areas -- be they low participation or excess losses. This authority allows FCIC to put the private sector's insurance expertise of providing coverage that is synchronized with risk exposure to maximum use in providing optimum coverage to worthy growers without excess losses. Private companies have invested significant resources to develop supplemental and alternative crop insurance products to fulfill this mandate. Thus far, however, FCIC has not utilized its authority to back them and while some are being offered, the lack of catastrophic risk protection has limited their availability to farmers.

Private Companies Bear Risk

You heard previously from GAO about how private companies on some occasions made money on the crop insurance program while the government suffered underwriting losses. While this was true in the past for a variety of reasons, let us focus on how that problem has been corrected. We can state, without hesitation, that the crop insurance program of today is not the crop insurance program of the 1980s. FCIC has taken numerous steps, with private sector help and cooperation, to improve the program, reduce its losses, and improve its product.

If the 1993 Standard Reinsurance Agreement (SRA) -- the contractual agreement between the government and the reinsured companies -- had been in place in 1988, the private companies

would have suffered losses of more than $100 million based on current premium levels. (See Exhibit 10 for a comparison of the 1993 and previous reinsurance agreements.) In the aggregate, if the entire national book had been written by one company, actual insurance experience for 1981-90 indicates that the underwriting gains and losses would likely vary between +11% and -15% with an average return of about 3% of total written premiums (Exhibit 10).

Today private companies participate in every dollar of indemnities paid to farmers on a crop insurance policy. In fact, on approximately 50% of the policies written, many companies have exposure of up to 70% of the total risk; depending on the size of the loss, companies could lose up to 70 percent of the premium written.

In administering the underwriting and delivery of the crop insurance program to farmers, insurance companies are required to perform a long list of functions (Exhibit 11). The government provides an expense reimbursement of 32.5 percent of the risk premium in 1993 to companies toward the costs of performing these duties. A comparison of expense rates is contained in Exhibit 9. The funding flow chart of Exhibit 12 illustrates the disbursement of these funds and the chronological order in which transactions take place.

Crop Insurance is a Rural Development Program

The goal of rural development programs is to provide rural communities with the financial base upon which to offer their residents the means to earn an income and improve their standard of living. Crop insurance is vital to the underpinning of this financial base.

Boosts Employment in Rural Areas. The federal crop insurance program delivered through the private insurance companies provides an estimated 45,000 full and part-time jobs, many of which are located in small rural communities -- the trade centers where crop farmers do their business. These jobs include local insurance agents and their office support staff who sell and service the crop insurance policies, independent crop loss adjusters, and other company personnel. On the average, $200 million of operating expense premium funnels back into the economy annually.

Provides Farmers and Communities with Economic Benefits. Crop insurance indemnity payments to farmers totalled about $8.8 billion for the period of 1981-1992. This is protection and income for the communities in which they live -- a form of economic security. In the event of a crop loss, it is the crop insurance indemnity which allows the farmer to pay his taxes, pay the local farm supply store, provide for his family, and make the loan payment to the local bank. The economic benefit of this aspect of crop insurance is estimated at $44 billion over the last 11 years (economic multiplier of 5x).

Conflicting Mandates and Policy Choices

From the beginning, the crop insurance program was destined for difficulty as it was given two conflicting mandates -- policies had to be universally available on a large number of crops, but the program's receipts had to cover its outlays. These two mandates are at war against one another. A program can be constructed to meet one of the objectives, but it is difficult to achieve both. However, FCIC and the private insurance companies who help deliver the program, have made significant strides in balancing the two mandates. The 12 year-old program is truly maturing as evidenced by increasing participation and decreasing losses.

Another point necessary to put crop insurance in perspective is that decisions made by

Congress often have a greater impact on a program than its administration by the executive branch. There are areas of the country where due to weather risks, soil conditions, or other factors, commercial crop production is a very risky business which can result in large losses. However, since public policy supports such production through farm programs (including crop insurance and other disaster programs), then it is difficult to place all of the responsibility for the expenditures involved in doing so on the program administrators or the private insurance companies assisting in its delivery.

Along these same lines, the continuation of ad hoc disaster assistance, with little or no requirement for purchasing crop insurance, does significant damage to farmer participation in the crop insurance program. As Secretary Espy so aptly pointed out in his testimony before this Subcommittee -- "Farmers don't buy insurance because the premium is too high. The premium is too high because the risk pool is too small. The risk pool is too small because Congress keeps handing out disaster assistance."

If Congress does decide to continue appropriating ad hoc disaster funds, however, we strongly encourage you and your fellow legislators to consider utilizing the crop insurance program for the delivery of that assistance and tying receipt of assistance to a longer-term commitment to participation in the crop insurance program.

Where Do We Go From Here

The FACT Act provided authority for numerous improvements that have yet to be implemented. Several of these measures, now near implementation, could provide significant benefits to the program in terms of both participation and better balancing of losses and premiums. At the same time, however, other changes are being contemplated of which the programmatic impact is not fully known.

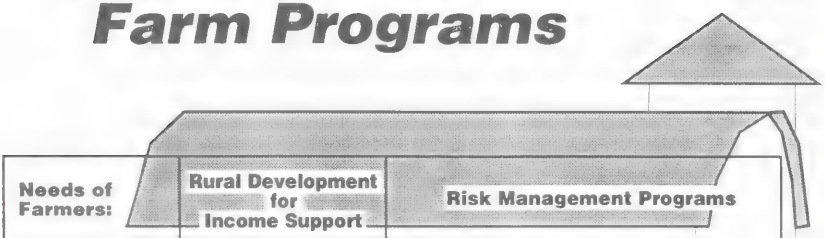
We believe that the core MPCI program and approach is working well in the majority of the country. Therefore, while some changes in approach may be warranted for some crops and areas, we believe wholesale replacement or radical change in the current program would be detrimental to the best interests of farmers and taxpayers. On the other hand, we recognize that some savings may be necessary to reach deficit reduction targets. Exhibit 13 outlines some possible changes to reduce federal costs; but let us understand that some items will also adversely impact the farmer users, although much less so than shifting to an area coverage plan. Our Association would be pleased to work with this and other interested committees of Congress to implement any changes found necessary to achieve budget savings.

We firmly believe that crop insurance is indispensable to the American farmer and is increasingly important as farmer risks increase. Crop insurance is the only policy tool that provides farmers with the security they need to obtain financing, the certainty of adequate relief they need for peace of mind and true risk management, and the flexibility they need in order to aggressively market their crops and receive a larger return from the marketplace.

There is no doubt that the private sector, with adequate reinsurance from the government for catastrophic loss management, is the most economical and most efficient delivery mechanism. We thank you for the opportunity to appear before you today and look forward to working with you to insure the continued viability and adequate funding of the crop insurance program.

Exhibit 1

What Growers Need From Farm Programs



Needs of Farmers:	Rural Development for Income Support	Risk Management Programs	
# of Farmers:	1.5 Million Farmers	309,000 Farmers	320,000 Farmers
% of Farmers:	70% of Farmers (96% of Income From Off Farm Source)	15% of Farmers (51% of Income From Off Farm Source)	15% of Farmers (13% of Income From Off Farm Source)
% of Gross Receipts:	8% of Farm Sales	12% of Farm Sales	80% of Farm Sales
Gross Sales:	$1,000 - $40,000	$40,000 - $99,000	$100,000 and up

The 1990s Will Expose Farmers To Increased Risk

- Less Income From Government Support Programs (major change ahead)
- Increasing Weather Variability
- More Price Volitility
- Trade Agreements Will Change Supply/Demand Rules
- Environmental Regulations Will Impact Production/Costs

Crop Insurance Has Good Business Qualities!

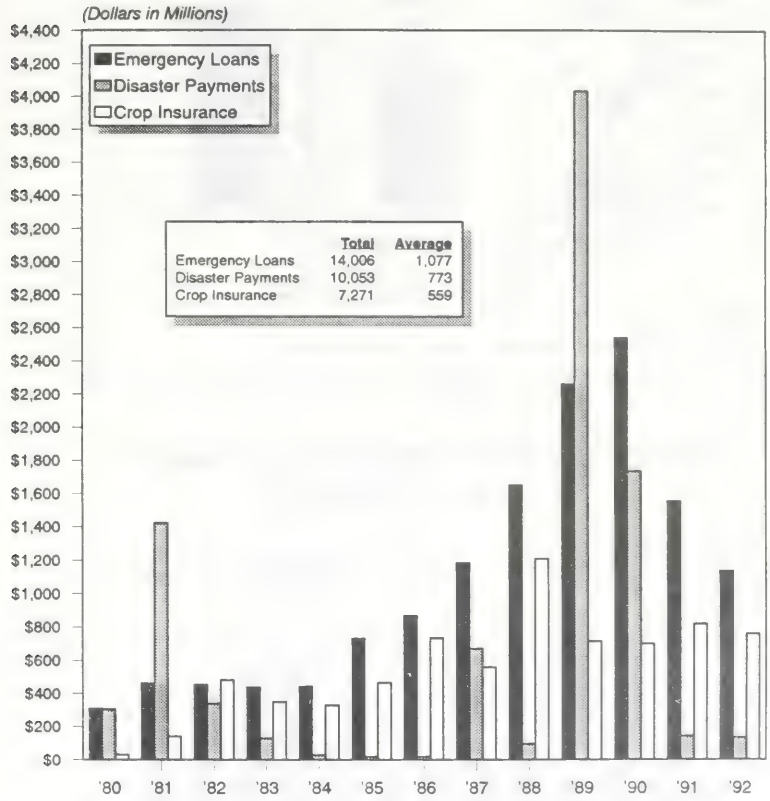
(Premiums are tax deductible in good years; indemnities are taxible in low income years)

Source: University of Kentucky

Exhibit 2

Government Costs For Agriculture

Disaster Assistance Programs -- Fiscal Years 1980-92



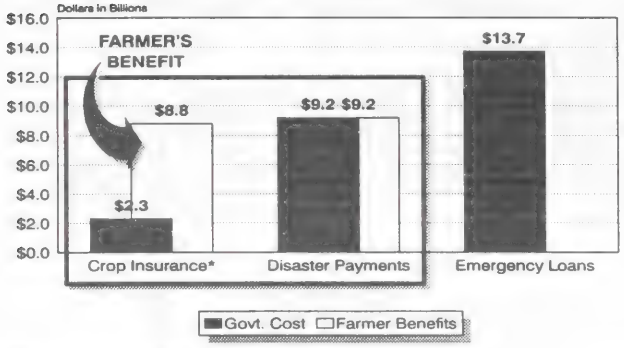
SOURCE: USDA estimates, budget documents, and GAO report on disaster assistance, Sept. 1989. Table format consistent with GAO presentation.

NOTE: Disaster payments present column of cash and cert payments in year disbursed. Thus, payments for 1989 losses, for example, are shown mostly in 1990. Crop losses based on year expenses appropriated and borrowing incurred, rather than year in which indemnities paid. Emergency loan costs largely represent losses on loans disbursed in earlier years.

Exhibit 3

Government Cost For Current Disaster Programs

1981-1992 Esimates



*(Losses in Excess of Total Premium)

These figures do not include administrative expenses of any of the programs.

Premiums & Loss Payments

Multiple Peril Crop Insurance

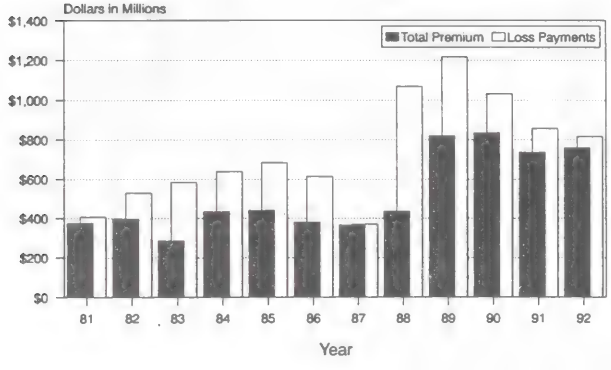


Exhibit 4

COMPARISON OF DISASTER ASSISTANCE PROGRAMS

Matrix Showing How Well Different Forms of Disaster Assistance Meet Criteria	Criteria	Crop Insurance	Disaster Payments	Emergency Loans
1.	The amount of disaster assistance provided should be determined by the amount of a farmer's loss, not by the severity of the disaster.	Yes	No	No
2.	Disaster assistance programs should provide similar amounts of assistance to farmers suffering similar amounts of losses.	No	No	No
3.	Disaster assistance recipients should not provide farmers more assistance than the amount of their disaster losses.	Depends[a]	Depends[a]	Depends[a]
4.	Disaster assistance programs should not create incentives to encourage farming practices that increase the likelihood and extent of losses.	Depends[b]	Depends[c]	Depends[b]
5.	Disaster assistance programs should be consistently available over time to allow for long-range planning.	Yes	No	No
6.	Disaster assistance programs, in the way they provide financial assistance, should help farmers withstand and recover from the effects of natural disasters.	Yes	Yes	Depends[e]
7.	Disaster assistance programs should have predictable annual costs.	Depends[f]	No	No
8.	Disaster assistance programs should meet their objectives at the lowest possible cost.	Depends[b]	Depends[c]	Depends[b]

[a] Would meet criterion if actual production histories were used exclusively.

[b] Would meet criterion to the extent that the programs were not subsidized. For crop insurance, incentives would be reduced to the extent that the premiums reflected actual risks and that the subsidization of high-risk participants by low-risk participants was minimized.

[c] Would meet criterion to the extent that losses are only partially compensated and that the compensation for risky farming practices was prohibited.

[d] The Emergency Fund Program and the Emergency Feed Assistance Program are consistently available to producers to help them with long-range planning.

[e] Meets criterion only to the extent that loan principal is forgiven.

[f] Meets criterion to the extent that the program is run on an actuarially sound basis.

GAO/RCED-89-211 Agriculture Disaster Assistance

Exhibit 5

PERFORMANCE IN THE 1980s

Without Crop Insurance Who Takes the Risk[1]?

Without crop insurance, some of the financial risk now covered by crop insurance would be transferred to USDA's Farmers Home Administration. Many commercial lenders would require an FmHA guarantee on loans now secured by crop insurance.

Currently, commercial lenders hold $37 billion in farm operating loans. Ron Ence, Independent Bankers' Association of America official, estimates that 75% of that debt is secured with crop insurance, based on a survey of IBAA bankers. Those same bankers indicated that at least 50% of that debt will need a reduction in financial risk, most likely with an FmHA guarantee. Assuming that 7.5% of those FmHA guaranteed loans becomes nonperforming, the result would cost the federal government nearly $1 billion.

Commercial banks and the Farm Credit System also hold $41.6 billion in farm real estate debt. Some of this debt would also be adversely affected by a reduction in farm level cash flow caused by a major drought, such as occurred in 1988, without crop insurance.

Crop insurance gives farmers the ability to meet debt repayment schedules and continue farming. While FmHA guarantees may prevent the bank from failing, they do not keep farmers farming beyond the fact that without a FmHA guarantee, those farmers would be denied credit in the first place. Younger farmers who have only very limited equity are often the ones most affected. The increased cost to the government from FmHA loan guarantees could be approximately equal to the cost of the crop insurance program. And with crop insurance, farmers are kept farming, supporting the commerce of local communities.

COST OF LOAN DEFAULTS vs CROP INSURANCE

Nonreal Estate Farm Debt[1]	
Commercial Banks	$ 27.9 billion
Farm Credit System	$ 9.2 billion
Total Nonreal Estate Debt	$ 37.1 billion
% of debt secured by MPCI[2]	72.0%
Debt Secured by MPCI	$ 26.7 billion
Percent of Debt that has MPCI required to meet debt servicing requirements[3]	50.0%
Debt that would need FmHA guarantee[3]	$ 13.4 billion
% of non-performing FmHA guaranteed loans	7.5%
Debt paid by Government	$ 1.0 billion
Government cost of Crop Insurance Program	$ 0.8 billion

[1] *Source: G.A (Art) Barnaby, Jr., Extension Agricultural Economist, Farm Management, Kansas State University, Manhattan, Kansas.*

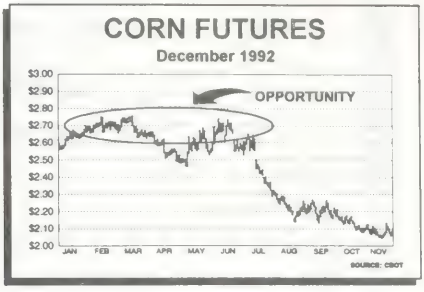
[2] *Source: Agricultural Letter, Federal Reserve Bank of Chicago, Public Information Center, P.O. Box 834, Chicago, Illinois 60690. Number 1792, August 10, 1990.*

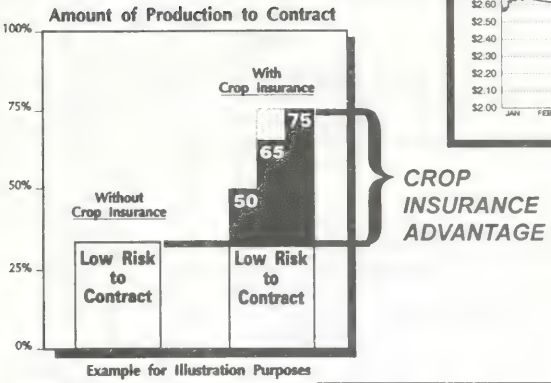
[3] *Source: Ron Ence, Independent Bankers' Association of America, Washington, D.C.*

Exhibit 6

MAXIMIZING PROFITS IN GOOD YEARS

With Crop Insurance





Source KSU

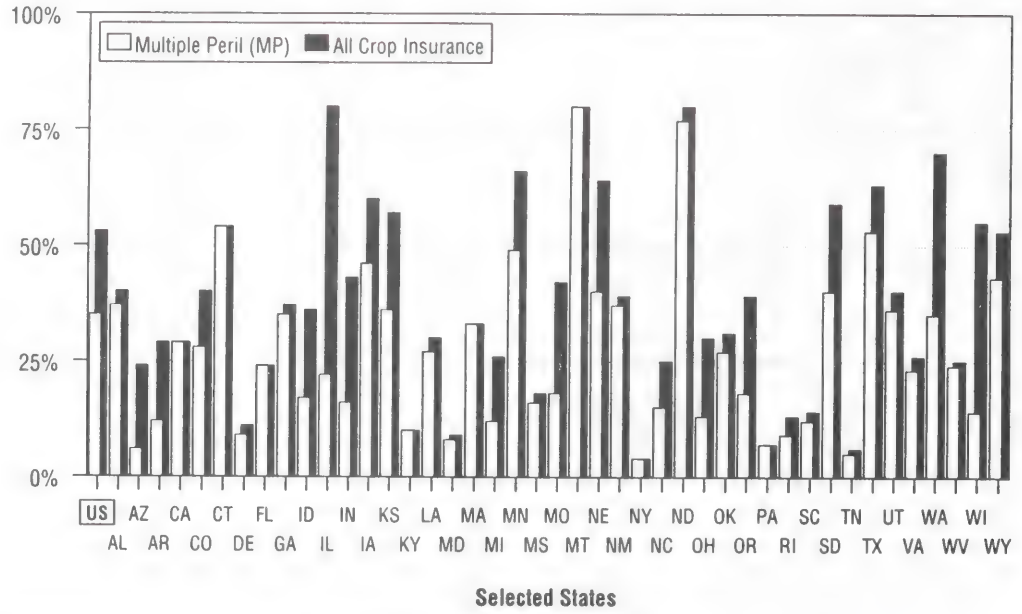
CORN ILLUSTRATION

Assumptions:			Your Farm
120 bu.	Yield/A.		_____
$2.60 /bu.	Contract Price	$	_____
$2.00 /bu.	Cash Price	$	_____
75 %	Crop Insurance Coverage		_____ %

Example:			Your Farm
120 bu./A.	Pricing Yield		_____ bu./A.
x 42 %	Contracting Advantage		_____ %
	75% of crop (Max amount to forward price with 75% MPCI)		
	-33% of crop (Max amount to forward price without MPCI)		
	(42%) of crop (Crop insurance advantage in forward crop pricing)		
= 50.4 bu./A.	Crop Insurance Benefit		_____ bu./A.
	Price Advantage		
x $.60 /bu.	($2.60 vs $2.00/bu.)	$	_____ /bu.
= $30.24	Reward/A.	$	_____
x 100	Acres		_____
= $3,024	Your Potential Advantage with MPCI	$	_____

1991 Crop Insurance Participation (% Acres Insured)

(Multiple Peril and Private Crop Hail/Fire)



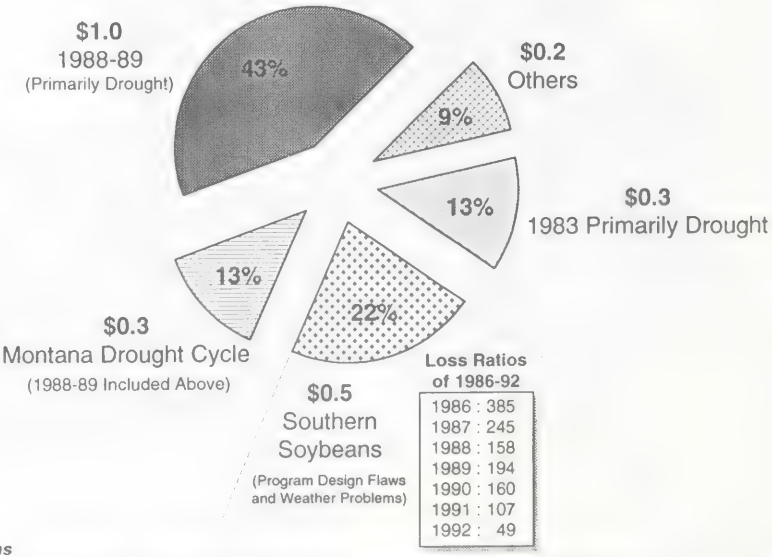
Estimates based on all writers and Nass data. Crop Hail/Fire estimates include projections derived from premium/acreage ratios, minus duplicate coverage, applied to industry totals.

Information courtesy of Rain and Hail Insurance Service, Inc. 3/93.

Exhibit 7

FCIC Indemnity Payments in Excess of Premiums

$2.3 Billion - 1981-91



Dollars in Billions

Exhibit 8 (1)

Exhibit 8 (2)

ACTUAL LOSS RATIOS

(BASED ON 1989-1992 RHIS BOOK)

PROJECTED LOSS RATIOS USING 1993 RATES

(BASED ON 1989-1992 RHIS BOOK)



Exhibit 6 (3)

Exhibit 9

Adequacy of Expense Allowance for Companies

The administrative cost comparison and evaluation of the adequacy of agent commissions was done through a contract by FCIC in 1990 with Arthur Andersen and Company. The findings were as follows:

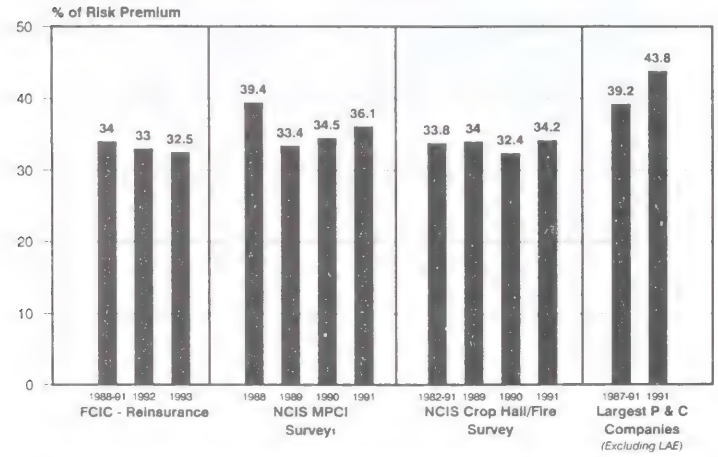
	Private Policies	FCIC Policies
Acquisition costs as a % of premiums	28.06%	35.81%
Loss adjustment expense as a % of premiums	9.70%	33.96%
Other costs as a % of premiums	5.41%	15.53%
Total delivery costs as a % of premiums	43.10%	85.30%
Adequacy of expense reimbursement rates	-2.95%	+ 0.70%

The report noted that agents received MPCI commission rates that were 3 to 6% of premiums below the rates for other lines of insurance.

EXPENSE RATE COMPARISON

Federal Crop Insurance Reinsurance Program & Other Lines of Insurance

(Adjusted to FCIC's Risk Premium Basis of Calculation)



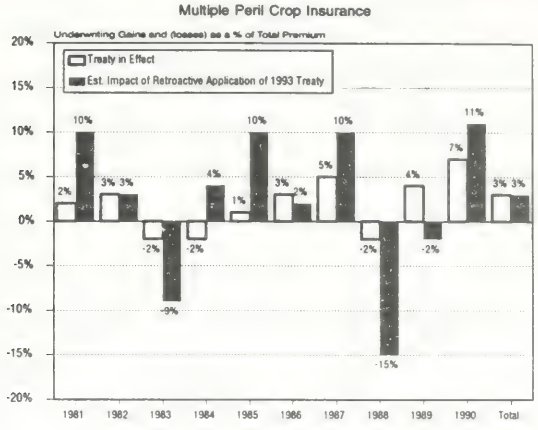
Note: NCIS (National Crop Insurance Service) is a trade association of the private industry specializing in statistical services.

1 Includes state premium tax

Exhibit 10 (1)

COMPARISON OF REINSURANCE TREATIES

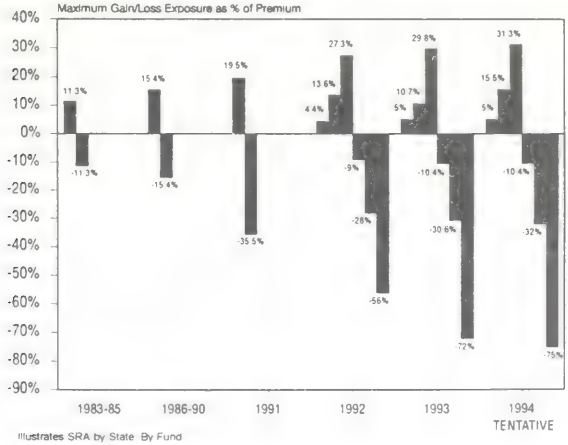
Historical & 1993 Applied Retroactively



Note: This comparison is based on applying the 1993 SRA retroactively to the entire FCIC book using standard underwriting approaches. The results may vary by individual company.

General Illustration of Increased Risk Requirements

FCIC Standard Reinsurance Agreements For Private Company Participation



Illustrates SRA by State By Fund

1993 SRA EVALUATION SUMMARY
(Applied to 1981-91 Industry Wide Data)

Fund/Pool	Average Annual Total Premium (% of Total Premium)	Average Annual Retained Premium (%of Company Retention)	Worst Year Loss	Best Year Gain	11 Yr. Average	% Retained Premium	% Total Premium
Assigned Risk Fund	$207 mil (29%)	$41 mil (20%)	-$2 mil	$.796 mil	-$1.4 mil	-3.40%	-.68%
Developmental Fund	$144 mil (18%)	$98 mil (66%)	-$11 mil	$.998 mil	-$3.6 mil	-3.66%	-2.49%
Commercial Fund	$385 mil (53%)	$374 mil (97%)	-$95 mil	$86 mil	$26.8 mil	+7.19%	+6.90%
Total All Funds	$735 mil(100%)	$513 mil	-$109 mil	$80 mil	$21.9 mil	+4.27%	+2.96%

Assumptions/Methodology: The above estimated results are from applying the 1993 Standard Reassurance Agreement to the 1981-91 combined insurance results for the entire FCIC book of business on an annual basis, using standard underwriting rules that are common in the private insurance industry. These results may vary from company to company based on the geographical areas of operation, their financial ability and their attitude on risk retention.

Exhibit 10 (3)

1993 SRA EVALUATION SUMMARY

(Applied to 1981 - 91 Industry Wide Data)

Detail

ST	Funds/Pools			
	Commercial	Develop.	Assigned Risk	TOTAL
AL	22.4%	50.1%	27.4%	100%
AZ	78.9%	9.1%	12.0%	100%
AR	0.0%	0.2%	99.8%	100%
CA	90.1%	0.0%	9.9%	100%
CO	81.1%	1.9%	17.0%	100%
DE	0.0%	83.9%	16.1%	100%
FL	12.6%	9.5%	77.9%	100%
GA	3.9%	43.4%	52.7%	100%
ID	8.5%	10.6%	80.9%	100%
IL	85.6%	0.6%	13.8%	100%
IN	63.0%	19.7%	17.3%	100%
IA	86.5%	8.9%	4.6%	100%
KS	71.6%	14.7%	13.7%	100%
KY	50.3%	33.0%	16.6%	100%
LA	32.3%	0.0%	67.7%	100%
MD	62.5%	21.6%	15.9%	100%
MA	73.0%	9.1%	17.9%	100%
MI	25.4%	0.0%	74.6%	100%
MN	66.5%	22.9%	10.6%	100%
MS	27.6%	0.8%	71.6%	100%
MO	80.4%	3.6%	15.9%	100%
MT	34.9%	29.6%	35.5%	100%
NE	86.3%	7.1%	6.6%	100%
NJ	0.0%	13.7%	86.3%	100%
NM	46.4%	2.2%	51.4%	100%
NY	22.0%	39.6%	38.4%	100%
NC	58.5%	38.3%	3.2%	100%
ND	50.7%	21.2%	28.0%	100%
OH	51.8%	33.2%	15.0%	100%
OK	51.0%	14.1%	34.9%	100%
OR	60.5%	14.6%	24.9%	100%
PA	71.6%	11.2%	17.2%	100%
SC	17.0%	47.8%	35.2%	100%
SD	73.5%	8.3%	18.2%	100%
TN	0.0%	52.0%	48.0%	100%
TX	4.9%	36.3%	58.8%	100%
UT	0.0%	6.9%	93.1%	100%
VT	100.0%	0.0%	0.0%	100%
VA	47.4%	36.5%	16.1%	100%
WA	36.1%	52.9%	11.1%	100%
WV	0.0%	23.1%	76.9%	100%
WI	81.1%	1.4%	17.5%	100%
WY	20.8%	60.0%	19.2%	100%
US	52.3%	19.5%	28.1%	100%

Estimate applying standard underwriting approaches that would likely apply if one company wrote entire FCIC book

FUNCTIONS PERFORMED BY REINSURANCE COMPANIES

Underwriting and Processing

APH Field Reviews
Fund Underwriting
Verification of Premium and Coverage Data
Process Applications
Process, Verify and Approve APH
Policy Issuance
Acreage Report Processing
Issue Summaries of Coverage
Process and Appove Revised Late Acreage Reports
Process LPO's, FCI-2's, Assignments, etc.
Premium Billing
Premium Collection
Process Terminations
Quality Control Over Underwriting and Processing
FCIC Reporting

Claims

Adjuster Training
Claims Audit
Verification of Claims Data
Pay Adjuster Expenses
Forms Production and Distribution
Claims Supervision
Adjuster Recruitment
Claim Related Litigation
Loss Notice Processing
Claims Payment Processing
Escrow Account Administration
Adjuster Licensing
1099 Processing
AD 1026

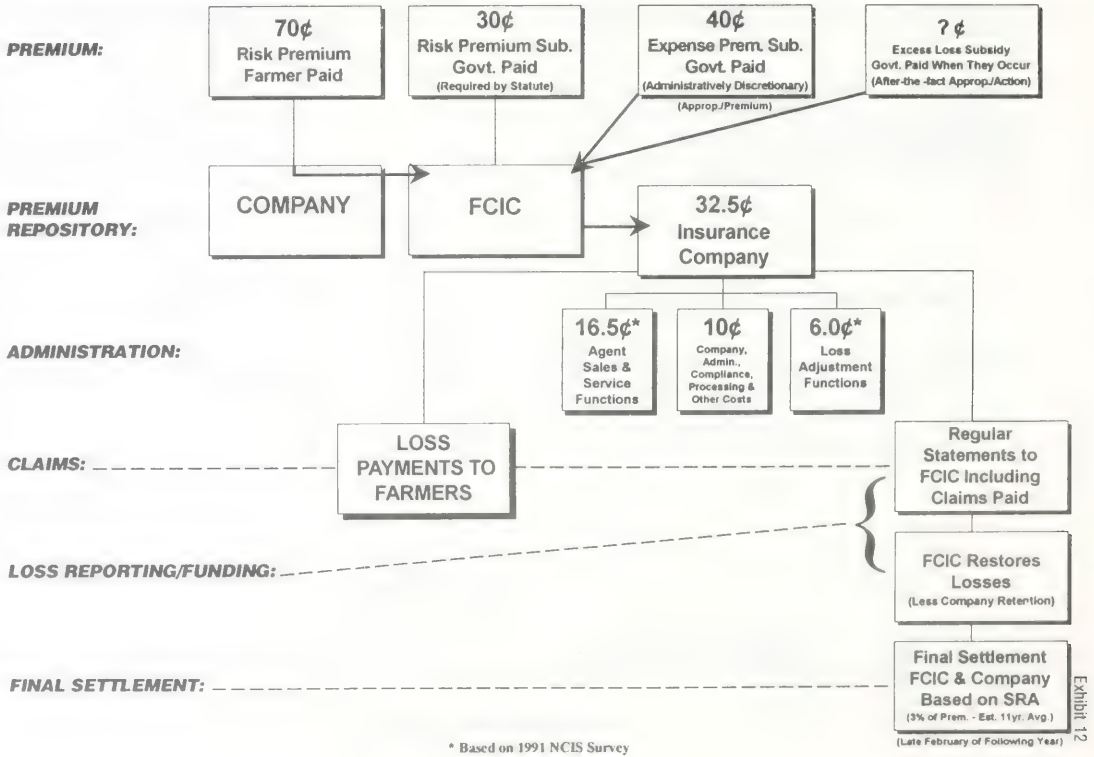
Business Acquisition

Agent Commissions
Agent Recruitment
Agent Training
Advertising
Agent Licensing
Audit of Marketing Activity
Production of Forms, Materials
Distribution of Forms, Material
1099 Processing

Other

Litigation
Corporate Insurance
Rate and Policy Filing
Financial Standards/Reserves/Reinsurance
Data Reporting
Company Licensing
Filing Annual Statements
Income Taxes
State Solvency Assessments
Premium Tax
Punitive Damages
Cash Flow/Borrowing Costs
Payment of Uncollected Premiums
Broker Costs
Post Hoc Program Changes - Underwriting
Post Hoc Program Changes - Administration
Salaries and Wages
Payroll Taxes
Employee Benefits
ADP Expenses
Misc. Overhead

Funding Flow Chart For FCIC's Reinsurance Program With Private Companies



* Based on 1991 NCIS Survey

Exhibit 12

Cost Reduction Ideas

Crop insurance needs full funding to meet the risk management need of an increasing number of crop farmers. However, to the extent that program cuts are necessary to meet the Administration's budget, the following could be considered:

Nature of the Program	Estimated Savings 1981 - 1992 (dollars in millions)	Impact
1. **No change -- benefits from actions already taken (savings achieved through directed scorekeeping):**		
a. Allow 1991 -'93 rate increases to work without further changes	$690 - $1,150	Would keep program stable while realizing savings. Estimate reductions in excess losses could be 30% to 50%.
b. Recalculate insurance experience based on distribution of the business. (Those who took advantage of flawed programs are no longer in the program.)	$345 - 690	Would self adjust experience to remove program glitches (i.e, S.E. soybeans, CA safflower, etc.). Estimate 15% to 30% reduction in excess losses.
c. Implement Social Security Number (SSN) policyholder tracking system (authorized by 1990 FACT Act).	$66 - $330	Minimize fraud and program abuse and allow improved underwriting. Reduces loss 1% to 5%.
2. **Changes with little impact on growers:**		
a. Accelerate FCIC's decision to discontinue the FCIC direct delivery system and eliminate duplicate functions (required by 1990 FACT Act). Schedule the re-engineering of FCIC to streamline, centralize, and downsize FCIC so that such cost savings could occur in FY93.	$20 - $30 annually	Approximately 9% of business would shift from FCIC to private policies (backed by FCIC). FCIC could eliminate support functions of second delivery system, streamline and centralize other functions. (Compliance function would not be affected. However, it should be evaluated on the basis of taxpayer savings that are generated.)
b. Streamline the administrative requirements placed on private companies, adjust activity deadlines, etc. to permit cost reductions.	$8 - $10 annually	Changes could be implemented that would reduce costs throughout the delivery system without increasing vulnerability to fraud and abuse.

Nature of the Program Changes	Est. Svgs. '81-'92 (dollars in millions)	Impact
3. **Changes that could be aimed at state crop programs with high loss ratios ONLY (i.e., greater than 150 loss ratio) -- not all policyholders in all state programs:**		
a. Eliminate prevented planting coverage.		Only impacts a small number of growers.
b. Eliminate replant payments.		Only impacts a small number of growers.
c. Limit the indemnity payments to avoid duplicate total indemnity payment for multiple crop losses on the same acreage in the year.		Additional crops grown on the same acreage in the same year would have reduced coverage if a total loss had previously been paid.
d. Evaluate the adequacy of the current unit surcharge on optional insurance units, the possible adoption of a minimum unit size, or consolidation of optional units.		Make indemnity calculations on more accurate bases. Could reduce excess losses on these policies by 10%-15%.
e. Move planting deadline dates earlier.		Reduce some of the risk exposure due to planting of crops after the optimum dates.
f. Adjust the level of coverage by 10 points. i.e., 75% to 65%, etc.		Freeze premium at current amounts, but reduce loss payments by reducing the level of coverage by 10 points.
g. Discontinue coverage for the highest risk group of policyholders' crops or areas.		Some growers would be without protection. This could impact their ability to secure operating loans.
4. **Broad changes:**		
a. Permit companies to provide alternate coverages (with Federal reinsurance backing) that could reduce the loss exposure of the current programs.		Eliminate the one size fits all approach.
b. Permit companies to more aggressively underwrite coverages on an individual producer basis.		Would help avoid paying many of the excess losses; would stop sales immediately when program design flaws are discovered.
c. Reduce indemnity price elections but still charge the same premium per acre.		Reduce coverage unilaterally to all policyholders without regard to the indemnity/premium balance in a given area. Supplemental price election policies could still offer same or higher protection.

CONCLUSION: The impact of any or all of the above changes can and will be altered when wide spread disasters occur, therefore, the savings will vary from year to year.

EXHIBIT 13 (2)

Exhibit 14

PROGRESS REPORT
of the
FEDERAL CROP INSURANCE PROGRAM

FARMERS BENEFITS: (1981 vs 1992)

✓ **Increased Farmer Participation**
12% -- 1980, **23%** -- 1988, **31%** -- 1992
(In 13 states more than 50% Multiple Peril, Crop Hail, Fire)

✓ **Improved Loss/Premium Ratio (US)**
146 -- 1981-90, **136** -- 1987-92, **125** -- 1989-92, As of February 1993 -- **109**

✓ **Stabilized Program - Improved Farmer Uncertainty**

✓ **Available From Local Insurance Agent**

✓ **Improved Claims Handling**
Current rates are only a small fraction of 1980's error rates.

✓ **Increased Private Risk Retention to Improve Performance**

✓ **New Uses Are Emerging**
- Foundation For Crop Marketing
- Potential Part of Revenue Insurance

✓ **Farmers Used MPCI/FCIC**
- To Maximize Profits in Good Years
- To Improve Cash-Flow When Disaster Strikes
- Safety Net Disaster Management
- To Help Assure Timely Loan Repayments
- To Collateralize Operating Loans
- To Reduce the Cost of Animal Feed
- To Improve Family Financial Security
- To Improve the Local Economy (5 x Multiplier)
- For Peace of Mind

✓ **Protection Is Available When the Farmer Needs It!**

RURAL COMMUNITY BENEFITS:

✓ **Boosts Employment (Est. 45,000 full & p.t. jobs)**
(Excellent ratio of jobs per federal dollars spent)

✓ **$500 Billion Economic Safety Net**
($99 billion liability (1981-1992) x 5 x economic multiplier)

✓ **$44 Billion Economic Benefits**
($8.8 billion indemnity payments (1981-1992) x 5 x economic multiplier)

✓ **$2 Billion to Local Businesses to Sell, Service, Adjust Claims, Management and Delivery of Crop Insurance - Up to $10 Billion in Added Commerce**

✓ **Crop Insurance vs Disaster Payments:**

	MPCI	Disaster Payments
Loss Payments:	$8.8 Billion	$9.2 Billion
Premiums:	$6.5 Billion	0
Net Costs (Excess of Premiums):	$2.3 Billion	$9.2 Billion
Loan Collateral Value:	$98.5 Billion	0

CROP INSURANCE PROGRAM

WITNESSES

MICHAEL CONNEALY, PRESIDENT, NATIONAL AG UNDERWRITERS, INC.
GARY OLSON, NATIONAL AG UNDERWRITERS, INC.
MIKE DAY, NATIONAL AG UNDERWRITERS, INC.

Mr. DURBIN. The National Ag Underwriters, Michael Connealy, Gary Olson, and Mike Day.

Mr. CONNEALY. Okay, Mr. Chairman. We will try to keep this as short as possible.

On behalf of National Ag Underwriters, we do appreciate the opportunity to testify before this subcommittee in support of a meaningful appropriation for the crop insurance corporation for fiscal year 1994.

National Ag is managed by Norwest Corporation, a bank holding company, and with me today representing the banking side is Mr. Gary Olson, President of the Norwest region headquartered in Sioux Falls, and also Mike Day of Crop Hail Management, another crop insurance business of Norwest, also located in Sioux Falls, South Dakota.

I guess we will begin by a statement as regards Norwest and our commitment to rural America, not only on the crop insurance side but also on the lending side. We are said to be the second largest ag lender in the United States and whether Norwest lends money to a family farmer or to a business such as a fertilizer dealer that sells its product on credit, crop insurance ultimately provides an important level of collateral, especially for younger farmers who do not yet have equity in their land or equipment.

I guess we will get into the numbers.

In 1992, Norwest had a national loan portfolio of roughly $775 million of what could be described as land or operating loans including FMHA guaranteed loans. Specifically, these loans were made with the expectation that the proceeds from the sale of the crops was going to repay the loans plus the appropriate interest.

Norwest uses a risk rating method which scores the loan from a high of a one to a low of a seven. Those loans rated as a one, two or three would not likely be adversely affected by a loss of the crop insurance program. These amounted to $220 million or roughly 28 percent of the total.

On the lower end of the spectrum, the five, six or seven, those would most likely be eliminated from the portfolio and we would consider reducing or dropping our support on the FMHA guaranteed loans. These amounted to $157 million or 20 percent of the total.

The mid range or those in the four level would also suffer some adverse effects. They would be charged either a higher interest rate, their operating line would be reduced or, in fact, Norwest would not be able to make a loan on that particular case. The impact on this 52 percent would be significant and costly to the borrowers and we believe ultimately to the rural communities in which they live.

We would also be pleased to update these numbers after the 1993 loan season is complete.

The second point we want to make is that to be an effective risk management tool and to provide the collateral for individual loans, crop insurance must be written on an individual yield basis, not on the group risk basis. Individuals, not groups, mortgage their homes and property, take out the operating loan and borrow the money. Individuals and not groups grow and harvest the crops and with identifiable insurable interests will purchase the crop insurance.

Banks, merchants and other lenders can only extend credit based on the risk characteristics of the individual borrower. Unless a lender knows that the individual who suffers the crop loss will be indemnified, credit will disappear, be reduced or become very expensive.

The third point is that we believe MPCI, multiple-peril crop insurance, is not a commercially insurable venture. Private companies have tried to insure against multiple risk since the turn of the century. Later attempts as late as 1975 in the southern states and certain midwestern states were also unsuccessful.

We believe that the insurers could no more absorb the risk of a widespread natural disaster than the farmers they were trying to protect.

As a result of these failures and because of the natural disasters that accompanied the 1930s, we had the crop insurance program enacted, in part, based on research back in 1915. From the outset, the federal crop insurance program was a domestic assistance program and we believe it remains so today. By this designation, the FCIC contract takes on added meaning. They are more than just government contracts intended to procure goods or services, they are contracts to carry out the public purpose of support or stimulation authorized by the law.

In other words, companies such as National Ag share in the responsibility "to promote the national welfare by improving the economic stability of agriculture through the sound system of crop insurance", these words from the Federal Crop Insurance Act.

Our next point involves the work National Ag and other contractors do and the expenses we incur to comply with our obligations to FCIC's standard reinsurance agreement. The amount of administrative expenses the FCIC reimburses its contractors is often the subject of attention but oftentimes the other side of the ledger is missed.

For instance, in our office for each crop year alone, National Ag generates approximately 70,000 policyholder files and every file remains active for at least three years. The work our policyholders require is reflected in the fact that in 1992 we processed approximately one and one-half million documents. In addition, our computer system processed ten and one-half billion bytes of information, all of this to comply with FCIC's contract and regulations.

We believe that the detail work we perform is necessary for the crop insurance program. Should FCIC amend its program requirements to delete any of this work for cost savings, we would have serious concerns. Unless Congress and the FCIC are prepared to accept less quality and less integrity in this program, the valid reimbursement for these costs must continue.

In addition to the costs of processing, we pay agents commissions in local areas across the country. The expense reimbursement and

commissions we pay our agents is an important source of income to the rural communities in which they live. A material reduction in their income not only affects their families but also the merchants in those communities.

In 1992, National Ag received roughly $35 million in expense reimbursements from FCIC. Over 50 percent or $18 million went back to the rural communities in the form of commissions to local agents. We believe the commission rates we pay are less than those prevalent elsewhere in the insurance industry when taking into account the work of the federal crop insurance program for the agent.

Our commissions to local agents average approximately 16.5 percent. These agents do field work and paperwork required to establish individual yields for producers. These individual yields are vital to the purchase of MPCI by the farmers. Our agents should be fairly compensated for this work.

In addition to agent commissions, National Ag paid its local loss appraisers and employees in excess of $6 million in salaries and expenses in 1992. Like our agents, these people live and work in the rural communities across the country. A reduction in the expense reimbursement in this area would result in a reduction of services to farmers and also cause a direct loss to the economy in these rural communities.

We have several ideas as far as substantial program savings should FCIC reallocate resources and, in particular, to the audit of questionable indemnity payments. Adverse selection against FCIC can occur as a result of actuarial calculation but more often it occurs in the field when losses are adjusted. The FCIC simply needs to do more compliance work and to do it on an up-front basis.

We would like to respond to certain criticisms of the FCIC and in particular their loss ratio. It has been criticized that loss ratio is high. However, we do not believe it reflects the peer insurance experience of the FCIC. It also reflects a domestic assistance experience and a catastrophic experience.

In 1984, a consulting actuary firm, Milliman & Robertson, recommended that FCIC define the term catastrophic and calculate two loss ratios. If this were done, FCIC's loss ratio on real insurance risk could be markedly lower and the commercial or private sector, which is in the business of spreading these risks, could assume more of it.

In a report dated September of 1989, the General Accounting Office concluded that the crop insurance program can provide assistance more equitably and efficiently than an emergency loan or direct payment program. Like the GAO, we believe that crop insurance meets more risk management criteria than any alternative program.

While FCIC has had program problems, we nevertheless believe Congress should rely on crop insurance exclusively to provide crop risk management protection.

Recently the FCIC has taken important steps to strengthen the program and reforms from the 1990 legislation are in place and working. They should be allowed to continue and meaningful funding approved for 1994.

By meaningful funding, we acknowledge that certain reductions will need to be achieved. We in the private sector, be it companies or agents, will have to force efficiencies into our operations due to lower expense reimbursements. Farmers may have to accept a slight reduction in the premium subsidy and FCIC may have to streamline for efficiency. What we cannot accept is any reduction in the bona fide benefits of the program to farmers. We need individual policies and substantial indemnities in the event of a bona fide insured loss.

We also believe we have to keep appropriations intact to maintain program integrity and compliance. Taxpayers should not have to read about program abuse from FCIC when it could have been prevented with proper oversight.

In closing, we look forward to working with this subcommittee and FCIC's new manager to bring new value to the federal program in this new environment we must accommodate.

We would be pleased to answer any questions.

Mr. DURBIN. Mr. Connealy, we have lost $2.6 billion on this program since 1980. In that period of time, we have had some ups and downs, we have paid out about $1.40 in losses for every dollar we have collected in premium.

Some reform is underway. You heard the previous testimony about what it might mean and how it might work in the future but this member of this subcommittee cannot sit here and say that this program works.

When I read your testimony about the obligation of the Federal Government to maintain these policies for these crops, I have to tell you there are some that we cannot in good conscience continue to insure. There are crops where frankly the taxpayer is being taken for a ride. There are crops that will never grow well. They will grow at great peril. No commercial venture would ever consider ensuring them.

And I come from rural America, I understand the opening of your remarks, how important agriculture is to rural America. But we cannot sit by and let these situations continue and say it is in the name of agriculture. This is just a bad policy decision that may have started here on Capitol Hill and has been perpetuated for years but we have to clean up.

Now, I am encouraged by the fact that you make some suggestions on how to clean it up. I want to ask you one specific question.

You said part of the problem here has to do with the adjustment of losses. Who adjusts losses now under the Federal crop insurance program?

Mr. CONNEALY. The majority of them are adjusted by companies.

Mr. DURBIN. Private insurance companies.

Mr. CONNEALY. Yes.

Mr. DURBIN. And what you are saying is that the FCIC simply needs to do more in the area of compliance. Now, I would read that to say that the companies that are being paid the 32 and a half percent are not doing their job very well. They are not adjusting the losses well and the taxpayers are paying for it.

Mr. CONNEALY. We would not limit the loss problem to just the actual adjustment of the loss. It could have been a program deficiency in putting the product out in the first place.

Mr. DURBIN. Well, I agree with that. I conceded that point at the outset.

Mr. CONNEALY. There is oftentimes that FCIC is warned of an impending problem in the field before the fact. For instance, safflower in California in 1991.

Mr. DURBIN. There was a GAO report on that.

Mr. CONNEALY. So it is not just that the loss is adjusted improperly, it is the fact that we have a program that is defective in the marketplace and FCIC once it puts it out has always been reluctant to pull it back in.

Mr. DURBIN. Well, I have come to the conclusion—and this is my personal conclusion, I do not speak for anybody else on this subcommittee—we cannot afford as a country, in the name of insurance, to continue to subsidize the losses for all crops in all states at all times. Number one.

Number two, some people in the agricultural community have got to wake up to the fact that some things just do not grow very well in certain states and planting them there should be a poor management decision that is not subsidized by the Federal Government.

Now, if that means that some farmers will go out of business, so be it because frankly farmers who cannot make a go of it under normal circumstances with normal growing seasons are not using good judgment in some cases. And we should not subsidize bad judgment year in and year out.

Mr. CONNEALY. We would agree with that. If you look at the companies, for instance, you mentioned the underwriting gain and the fact that companies seldom seem to share in the underwriting loss because we make those same judgments on our book of business. We look through those same ten years of records by crop, by county.

And, yes, FCIC or Congress has mandated that we have a program for a certain crop in a county. We can see the record and then we choose to service it. We will sell a policy if someone wishes to have it sold but we do not maintain any risk on it.

Now, if the Members of Congress——

Mr. DURBIN. In other words, the Federal Government ends up picking up the risk of that particular insurance policy.

Mr. CONNEALY. Correct.

Mr. DURBIN. You have made an arm's length business decision that this is a bad idea but it is frankly not your decision to sell the insurance.

Mr. CONNEALY. Correct. Our decision is——

Mr. DURBIN. This sounds a lot like the savings and loan debacle.

Mr. CONNEALY. Our decision is that we can see the crop in the county and the record, the same that you are reviewing. And if FCIC or Congress or whoever wants to have it out there, that is fine, we will sell it but, no, the private sector is not really taking any risk on it.

Mr. DURBIN. I do not blame them. Some of these are awful.

Mr. Skeen?

Mr. SKEEN. Thank you, Mr. Chairman.

And I thank the panel for their responses and also the input into how we are going to make this thing work.

There has been an idea floated over the past years about letting the ASCS offices or somebody connected with the Agriculture Department to sell insurance services. Give me your response to that and appraisal and criticism of it.

Give me a measured response to that about why you think it would or would not work.

Mr. CONNEALY. We believe that the independent agent network is largely responsible for the increase in the premiums that we have had between the 1980s and the 1990s in conjunction with a few disasters that were well timed.

Agents and the money that we pay the agents in the form of commissions are a much more competitive group than an ASCS office or any government office. We pay those agents based on their results. If they sell policies, they receive commissions. To do that, they are out knocking on farmers' doors and sitting down at the kitchen table selling the product.

We do not see that the ASCS office or any government office located in a central location can match that type of service to the customer and we tell our agents that the farmer is the customer for this program and they have been very successful in marketing it in that manner.

We think the farmers would have a major backlash if you moved it away from an agent delivery source.

Mr. SKEEN. What about loss adjustments? Would that have to be part of the responsibility and the expertise of the ASCS office if that arrangement were to ever come about?

Mr. CONNEALY. Well, they would have to duplicate what we do now.

Mr. SKEEN. But you do not do it from the agency, you do this as a group service. Is that correct?

Mr. CONNEALY. We adjust losses with a different workforce than agents.

Mr. SKEEN. Absolutely.

Mr. CONNEALY. That expertise lies in a different group of people than the agents and it also is a much more efficient mechanism, we believe, than an ASCS office because we only pay—the majority of the adjusters are independent contractors and we only pay them during periods of time when they are actually employed.

Mr. SKEEN. But you reimburse them through the contracting agent? Your own agent?

Mr. CONNEALY. No.

Mr. SKEEN. Who pays them?

Mr. CONNEALY. The agents get reimbursed from us.

Mr. SKEEN. That is what I am talking about.

Mr. CONNEALY. On a contract. The adjusters get reimbursed on a separate contract.

Mr. SKEEN. With a total company or with a separate agent?

Mr. CONNEALY. No, with this company. With National Ag.

Mr. SKEEN. Thank you. I thank you for your responses.

Thank you, Mr. Chairman.

Mr. DURBIN. Thank you for joining us today.

Mr. CONNEALY. Thank you.

Mr. DURBIN. As you can tell, we are wrapped up in this program trying to figure out how to sort it out. The administration has

given us some direction. They have told us that they want to save it, their suggestion on how to save it is being debated and we are trying to entertain some alternatives.

I thank you for your testimony. It will help us in reaching some conclusions.

Mr. CONNEALY. Okay. Thank you, Mr. Chairman.

[The information follows:]

STATEMENT OF

MICHAEL CONNEALY
PRESIDENT, NATIONAL AG UNDERWRITERS, INC.

BEFORE THE

SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE AND RELATED AGENCIES, COMMITTEE ON APPROPRIATIONS, HOUSE OF REPRESENTATIVES

MARCH 30, 1993

Mr. Chairman and Members of the Subcommittee:

On behalf of National Ag Underwriters, we appreciate the opportunity to testify before this subcommittee in support of a meaningful appropriation for the Federal Crop Insurance Corporation for fiscal year 1994. National Ag is managed by Norwest Corporation, a bank holding company, and with me today representing Norwest Bank is Mr. Gary Olson, President of Norwest's region headquartered in Sioux Falls, South Dakota, and Mr. Mike Day of Crop Hail Management, another crop insurance business of Norwest, also in Sioux Falls.

We believe that the unique importance of the Federal crop insurance program in rural America is perhaps best illustrated by Norwest's own experience. Norwest is committed to rural America; we are said to be the second largest Ag lender in rural communities in the United States. Whether Norwest lends money to a family farmer or to a business such as a seed or fertilizer dealer that sells its products on credit, crop insurance ultimately provides an important level of collateral, especially for those younger farmers who do not yet have significant equity in their land or equipment.

The Federal crop insurance program is essential to the

creditworthiness of these farmers and, therefore, to the viability of our rural communities and towns. Those communities and towns, their schools, churches, hospitals and merchants are dependant on farm income and therefore are as much affected by uninsured natural disasters as are the farmers whose crops are destroyed. The Federal crop insurance program is, therefore, as much their risk management tool as it is for the farmers who purchase the policy.

Thus, the first and foremost point we want to impress upon this subcommittee is our belief that a substantial reduction in the Federal crop insurance program will have far-reaching socio-economic consequences for rural America. If crop insurance is eliminated or materially reduced as a source of collateral, the availability of credit will diminish immediately and the consequences of every major storm or drought will affect not only uninsured and underinsured farmers but will echo through every community.

In 1992, Norwest had a national loan portfolio of about $775,000,000 on what could be described as land or operating loans, including FMHA guaranteed loans. These loans were made with the expectation that the proceeds from the sale of the crops were going to repay the loans plus the interest. Norwest has a risk rating method which scores its loans from a high of one to a low of seven. Those loans rated as one, two or three would likely not be adversely affected by the loss of a meaningful crop insurance program. Those loans amounted to $220,000,000 or 28

percent of the total. Those loans rated as five, six, or seven would most likely be eliminated from the Norwest loan portfolio; additionally Norwest would consider reducing or dropping its Farmers Home Guaranteed Loans. These loans amount to $157,000,000 or 20 percent of the total. Those loans rated as four would also be affected. They would be charged a higher interest rate; their operating lines would be reduced; or Norwest would make no loan at all. The impact on this 52 percent of Norwest's borrowers would be significant and costly to the borrower and ultimately to the rural communities in which they live. We would be pleased to update these numbers after the 1993 loan season is completed.

The second point we want to emphasize is that to be an effective risk management tool and to provide collateral for individual loans, crop insurance must be written on an individual yield basis, not on a group risk basis. Individuals, not groups, mortgage their homes and property, take out operating loans, and borrow money for the purchase of seed, fertilizer, chemicals and fuel. Individuals, and not groups, grow and harvest crops and individuals, with identifiable insurable interests, purchase crop insurance. Individual entities, be they family farmers or corporations, are the basis of a free enterprise farm economy and the result of their production speaks for itself.

Banks, merchants and other lenders can only extend credit based on the risk characteristics of the individual borrower. Risk and collateral, which are the components of

creditworthiness, can not be evaluated on a group basis or on countywide averages. Unless a lender knows that the individual who suffers a crop loss will be indemnified, credit will disappear, be reduced or become very expensive. The fact that the borrower will be indemnified if an entire group suffers a loss large enough to qualify for insurance is simply not a quantifiable risk. Group risk insurance is not a banker's answer or an insurer's answer to individual needs; nor should it be the Government's.

This brings us to our third point and that is that multiple peril crop insurance is not a commercially viable venture. Private companies tried to insure crops against multiple risks starting in 1899 in North Dakota and Minnesota. Later attempts were made in Montana, Kansas and in various southern and midwestern states. Every effort was unsuccessful because insurers could no more absorb the risk of widespread natural disaster than could the farmers they were trying to protect. Sufficient capital capacity did not exist then and it certainly does not exist now for the exposure that multiple peril crop insurance carries with it.

As a result of these failures and because of the natural disasters that accompanied the economic disasters of the 1930's, Congress enacted a Federal crop insurance program which was based, in part, on research that the Department of Agriculture had begun in 1915. From the outset, the Federal crop insurance program was a domestic assistance program and it remains so

today.

By this designation, the FCIC's contracts take on an added meaning. They are more than government contracts intended just to procure goods or services. They are contracts to carry out a public purpose of support or stimulation authorized by a law of the United States. In other words, companies such as National Ag share in the responsibility "to promote the national welfare by improving the economic stability of agriculture through a sound system of crop insurance," to borrow the words of the Federal Crop Insurance Act. Accordingly, when Congress changes the terms of the Federal Crop Insurance Act or when the FCIC changes the terms and conditions of our contract, the Government is making a value judgement as to how the national welfare may best be promoted through the economic stability of agriculture.

National Ag believes that the national welfare is best served by widespread participation in the Federal crop insurance program and by the sale and service by private companies of sanctioned insurance products that protect individual growers against natural disaster. National Ag also believes that the national welfare requires the FCIC to maintain a stringent compliance program that holds contractors liable for negligence and dishonesty and accountable for the funds they disburse.

Our next point involves the work National Ag and other contractors do and the expenses we incur to comply with our obligations under the FCIC's Standard Reinsurance Agreement. The amount of administrative expenses the FCIC reimburses its

contractors are often the subject of attention but the other side of the ledger, we believe, deserves equal attention and understanding.

Each crop year alone, National Ag generates approximately 70,000 policyholder files and every file remains active for at least three years. The work our policyholders require is reflected in the fact that in 1992 National Ag processed approximately 1 1/2 million documents. We received in our mail room 12 tons of documents and shipped or mailed out 55 tons of documents to our agents and policyholders. In addition, our computer system processed 10 1/2 billion bytes of information - all of this to comply with the FCIC's contract and regulations.

We believe that the detail work we perform is necessary for the Federal crop insurance program. If the FCIC amends its program requirements to delete any of this work for cost savings, we would have serious concerns. Unless Congress and the FCIC are prepared to accept less quality and integrity in this program, reimbursements for costs must be continued. Additionally, we do not believe any savings will be realized merely by shifting certain work from the private sector to the public sector. Indeed, the private sector's capital investments are made. Why waste them and then spend Federal funds requiring the FCIC to duplicate them?

In addition to the costs of processing, National Ag pays commissions to its agents. Ten years ago, most of the agents who would sell crop insurance did so exclusively; they were one-line

agents. Today, most of our agents are independent, multi-line agents. They are professional, educated risk managers who see a value in our product that complements the casualty insurance, life insurance and variable annuities that they also sell. The transformation of the former crop insurance agency network to the present network of professional, independent agents is one of the FCIC's major accomplishments.

Moreover, the expense reimbursements and commissions we pay our agents are an important source of income to the primarily rural communities in which they live. A material reduction in their income not only affects their families but the merchants with whom they shop, the charities to which they contribute and the general stability of their communities. In 1992, National Ag received roughly $35,000,000 in expense reimbursements from the FCIC. Over 50 percent or $18,000,000 went back to the rural communities in the form of commissions to local agents. We believe the commission rates we pay are less than those prevalent elsewhere in the insurance industry, especially when the added work of the Federal crop insurance program is taken into account. Indeed, under the Federal flood insurance program, agents are allowed commissions of 20 percent on policies with premiums in excess of $2,000. On the other hand, our commissions to local agents average approximately 16.5 percent.

Agents do the field work and paperwork required to establish individual yields for each producer. These yields are vital to the purchase of multiple peril crop insurance by low risk

farmers, the farmers from whom the FCIC will make a profit. Our agents should be fairly compensated for their important work. The use of private agents, the sale of individual risk insurance and the payment of claims based on individual results is a much more sensible solution to rural risk management need than a group risk plan or a scatter gun disaster program.

In addition to agent commissions, National Ag paid its local loss appraisers and employees over $6,000,000 in salaries and expenses in 1992. Like our agents, these people live and work in rural communities across the country. Thus, a reduction in expense reimbursements will not only result in a reduction of services to our farmers, but will also cause a direct loss to the economy in our rural communities.

National Ag has submitted for the record a supplemental memorandum that we hope will explain our understanding of the FCIC's role in a fairly complicated universe of statutes and regulations. As fully explained in that memorandum, we believe that the FCIC would protect federal funds from unauthorized expenditures and therefore save money, if it required its contractors to comply with the cost principles of the Federal Acquisition Regulation. To the best of our knowledge, these cost principles, or similar ones that are published by OMB as circulars, apply universally to all government contracts, grants and cooperative agreements. Again, to the best of our knowledge, the FCIC does not have a statutory or regulatory exemption from these cost principles. We believe that neither the FCIC nor its

contractors should operate outside that regulatory structure which was designed to ensure effective and efficient spending of public funds.

National Ag believes that substantial program savings could result if the FCIC reallocated resources to the audit of questionable indemnity payments. Adverse selection against the FCIC can occur as a result of actuarial calculations but more often it will occur in the field when losses are adjusted. The FCIC simply needs to do more compliance work.

In this regard, we strongly believe that federal funds that could be spent on a FCIC compliance program should not be spent by the FCIC to duplicate the resources that National Ag and other managing general agencies already have and to perform the work the private sector can perform. Just as we cannot perform FCIC audits because that is a Government function and we do not have the Government's police powers, the Government need not perform functions that should be private, such as delivering the product.

Finally, we would like to respond to certain criticisms of the FCIC. The FCIC is criticized for its high loss ratio but that loss ratio does not reflect the FCIC's pure insurance experience. The FCIC's loss ratio also reflects its domestic assistance experience and its catastrophic experience which is different than insurance experience.

In 1984, the consulting actuarial firm of Milliman & Robertson recommended that the FCIC define the term "catastrophic" and calculate two separate loss ratios. If this

were done, the FCIC's loss ratio on its real insurance risks would be markedly lower and commercial companies, which are in the business of spreading real insurance risks, could assume more risk.

In 1980, when Congress enlarged the Federal Crop Insurance Act, no one could anticipate the dramatic and unprecedented swings that would occur in interests rates, fuel costs, land values, levels of production and in international and domestic prices. All of these factors affected premium income, administrative costs and the amount of indemnities paid. But how much more costly would have been the drought of 1988 but for crop insurance? How much more farm land would have been lost to foreign investors but for crop insurance? How much more farm income from exports would have been lost by family farmers to overseas competitors but for crop insurance? And how many more taxpayers' dollars would have been spent less equitably on disaster payments but for crop insurance?

In a report dated September, 1989, the General Accounting Office concluded:

> "The crop insurance program can provide assistance more equitably and efficiently than the emergency loan and direct payment programs."

Like the GAO we believe that crop insurance meets more risk management criteria than any alternative program. While the FCIC has had program problems, we nevertheless believe Congress should rely on the crop insurance program exclusively to provide crop risk management protection. The FCIC has taken important steps

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to strengthen the program; reforms from the 1990 legislation are in place and working; they should be allowed to continue and meaningful funding should be approved.

By meaningful funding, we acknowledge that certain reductions will need to be achieved. We in the private sector, companies and agents, will have to force efficiencies into our operations due to lower reimbursements from the FCIC. Farmers may have to accept a slight reduction in the premium subsidy and FCIC may have to streamline for efficiency. What we cannot accept is any reduction in bonafide benefits to farmers.

The Federal crop insurance program is a self help program that also helps our rural economies. We need individual policies and substantial indemnities in the event of bonafide insured losses. We also believe we have to keep appropriations intact to maintain program integrity and compliance; taxpayers should not have to read about "program abuses" which could have been prevented with proper oversight by the FCIC.

We look forward to working with this Subcommittee and the FCIC's new manager and deputies to bring new value to the Federal crop insurance program in the new fiscal environment we know we must accommodate. Mr. Olson and I would be pleased to respond to any questions.

MEMORANDUM OF

NATIONAL AG UNDERWRITERS, INC.

SUBMITTED TO THE

SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE AND RELATED AGENCIES, COMMITTEE ON APPROPRIATIONS, HOUSE OF REPRESENTATIVES

MARCH 30, 1993

This memorandum supplements the testimony of National Ag Underwriters, Inc. ("National Ag") before the Subcommittee on Rural Development, Agriculture and Related Agencies, Committee on Appropriations, House of Representatives. This memorandum will explain National Ag's understanding of its responsibilities and those of the Federal Crop Insurance Corporation ("FCIC") under the Federal Crop Insurance Act, under other statutes and various regulations that apply to government contractors, generally, and under the FCIC's Standard Reinsurance Agreement ("SRA") and will amplify on National Ag's proposals to improve the Federal crop insurance program.

For the reasons below, National Ag believes that without statutory amendment and without diminution in service or increase in cost to policyholders, the FCIC could achieve targeted savings and reduce certain risks to the government by: (1) applying government-wide cost principles to its contractors so that federal funds were not spent for other than their appropriated purposes and that administrative reimbursements, which fluctuate with crop prices, did not either unjustly enrich or inhibit contractors; (2) conducting annual close-out audits of each contract and recouping disallowed costs; (3) increasing its audit

of loss adjustments and indemnity payments; (4) asserting regulatory authority over private risk bearers, commercial reinsurers; and (5) implementing certain specific cost saving measures.

I. THE FEDERAL CROP INSURANCE PROGRAM IS A DOMESTIC ASSISTANCE PROGRAM

The Federal crop insurance program is a domestic assistance program within the meaning of 31 U.S.C. § 6101 and is listed in the Catalog of Federal Domestic Assistance Programs as prescribed by 31 U.S.C. § 6104. In accordance with sections 507(c) and 508(h) of the Federal Crop Insurance Act, the FCIC engages in the sale and service of crop insurance primarily through its SRA into which it enters with qualified insurance companies and managing general insurance agencies.

The SRA, in turn, is a "cooperative agreement" within the meaning of 31 U.S.C. § 6305. That statute defines the purpose of cooperative agreements and, thereby, the purpose of the SRA as follows:

> "An executive agency shall use a cooperative agreement as the legal instrument reflecting a relationship between the United States Government and a State, a local government, or other recipient when -
>
> "(1) the principal purpose of the relationship is to transfer a thing of value to the State, local government, or other recipient to carry out a public purpose of support or stimulation authorized by a law of the United States instead of acquiring (by purchase, lease, or barter) property or services for the direct benefit or use of the United States Government; and
>
> "(2) substantial involvement is expected between the executive agency and the State, local government,

> or other recipient when carrying out the activity contemplated in the agreement."

In the words of the statute, the FCIC ("an executive agency") uses the SRA ("a cooperative agreement") as the legal instrument defining the relationship between the FCIC ("the United States Government") and a reinsured company ("a recipient"). The principal purpose of that relationship is to transfer administrative and operating reimbursements and a participation in underwriting results ("a thing of value") to an insurance company ("a recipient") to support and stimulate, in the words of section 502 of the Federal Crop Insurance Act, "the economic stability of agriculture through a sound system of crop insurance" ("a public purpose of support or stimulation authorized by a law of the United States") instead of acquiring the property and services necessary for the FCIC to provide the same support and stimulation directly.

Moreover, as contemplated by section 6305, there is substantial involvement between the FCIC and its contractors in "carrying out the activity contemplated" by the SRA. On a daily basis, National Ag and the FCIC transmit data to each other; the FCIC provides program and policy interpretations; the FCIC audits National Ag's accounts and policyholders; and National Ag, at its cost, makes its personnel available to the FCIC in its management and supervision of the crop insurance program.

In describing the Federal crop insurance program in 1947, the Supreme Court noted:

> "Judging from the legislative history of the Act, the Government engaged in crop insurance as a pioneer. Private insurance companies apparently deemed all-risk crop insurance too great a commercial hazard." Federal Crop Insurance Corporation v. Merrill, 332 U.S. 380, n.1.

That statement has remained true throughout the history of the Federal crop insurance program. In connection with the 1980 amendments to the Federal Crop Insurance Act, the House Committee on Agriculture described the need for a widespread Federal crop insurance program as follows:

> "Agriculture producers are involved in a high risk pursuit both in terms of debilitating economic savings and the vagaries of natural phenomenon.
>
> "Relying to such a large extent on borrowed funds accentuates the financial damage which occurs when drought, flood, insects, disease or other natural disaster strikes a farmer's crop. In a matter of days or even hours a natural disaster can wreak financial ruin on an individual farmer or perhaps an entire rural community." "Federal Crop Insurance Act of 1979," Committee on Agriculture, House of Representatives, 96th Cong., 1st Sess., Rept. No. 96-430, pp. 8-9.

Congress recognized, however, that "in a matter of days or even hours a natural disaster can wreak financial ruin" on insurance companies as well. For this reason, and because the purpose of the Federal Crop Insurance Act was to insure all crops in all counties at levels sufficiently affordable to eliminate the need for ad hoc disaster payments, the Federal crop insurance program, like insurance programs for floods, riots, unemployment and medicare, has to be a domestic assistance program and the Federal Government has to be the primary insurer.

Parenthetically, while the FCIC alone has the capacity to insure or reinsure the Federal crop insurance program, private

companies that sell multiple peril crop insurance must still retain sufficient risk to have a financial stake in accurate loss adjustments. The amount of capacity that must be had to assume this risk, however, is vastly different than the amount of capacity that is necessary to assume the underwriting risk for the Federal crop insurance program. The 1994 SRA requires companies to have sufficient capacity at risk to enforce the honest adjustment of losses. Additional risk requirements will simply exceed existing capacity, forcing insurers to sell and underwrite fewer policies. Moreover, the new investor capital that is needed to generate new capacity is unlikely to develop because of uncertainty over the program's future.

II. THE FCIC SHOULD APPLY THE FEDERAL ACQUISITION REGULATION TO ITS CONTRACTORS

Because the FCIC reimburses its contractors' expenses with funds that have been appropriated, contractors may not use those funds for other than their appropriated purposes. Thus, in general terms, contractors may only spend those funds "to promote the national welfare by improving the economic stability of agriculture through a sound system of crop insurance," 7 U.S.C. § 502.

More specifically, and more importantly, contractors should only spend appropriated funds if their expenditures are allowable, that is, if they are both "reasonable" and "allocable" as defined in sections 31.201-3 and 31.201.4 of the Federal Acquisition Regulation ("FAR"), 48 C.F.R. Ch. 31 et seq., which

respectively provide, as here pertinent:

> "(a) A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business....the burden of proof shall be upon the contractor to establish that such cost is reasonable.
>
> "(b) What is reasonable depends upon a variety of considerations and circumstances, including -
>
> "(1) Whether it is the type of cost generally recognized as ordinary and necessary for the conduct of the contractor's business or the contract performance;
>
> "(2) Generally accepted sound business practices, arm's length bargaining, and Federal and State laws and regulations;
>
> "(3) The contractor's responsibilities to the Government, other customers, the owners of the business, employees, and the public at large; and
>
> "(4) Any significant deviations from the contractor's established practices.
>
> "A cost is allocable if it is assignable or chargeable to one or more cost objectives on the basis of relative benefits received or other equitable relationship. Subject to the foregoing, a cost is allocable to a Government contract if it -
>
> "(a) Is incurred specifically for the contract;
>
> "(b) Benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received; or
>
> "(c) Is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown."

The FAR establishes a method of accounting for unallowable costs and defines the terms "direct costs" and "indirect costs." These definitions are of critical import in identifying costs that should not properly be charged to the government. Finally, the FAR selects 46 specific items of cost and discusses their

allowability.

The SRA may well be the only government contract, cooperative agreement or grant that does not require compliance either with the FAR's cost principles for commercial organizations or with the Office of Management and Budget's counterparts for nonprofit organizations, educational institutions and state, local and Indian tribal governments. Without the system of record keeping and concomitant accountability that the Government otherwise imposes universally on its contractors and grantees through its cost principles, the FCIC cannot determine whether the costs its contractors incur are allowable, as that term is defined above, and, therefore, whether its cost reimbursements are adequate, inadequate or excessive.

Arthur Andersen & Co. reached a similar conclusion in a 1989 report to the FCIC that the FCIC had commissioned. As here pertinent, Arthur Andersen stated:

> "A critical ingredient in the overall evaluation of the FCIC reimbursement levels comes from within the FCIC. It is essential that the reimbursement rate be evaluated in light of the Program goals and intentions. Key questions such as, 'What is the reimbursement intended to cover?' and, 'How does the reimbursement function impact the Program's goals?' need to be addressed to reach a conclusion as to the fairness and effectiveness of the reimbursement levels.
>
> * * *
>
> "The FCIC should make a determination regarding which of the contractors' costs are allowable for reimbursement and communicate the information to the contractors, preferably within the contractor agreements." Arthur Andersen & Co., "Review of Reimbursement Rates and Costs Incurred by the FCIC for the Federal Multiple-Peril Crop Insurance Program," p. 10.

The FAR answers Arthur Andersen's questions. Promulgated pursuant to the Office of Federal Procurement Policy Act, 41 U.S.C. §§ 401 et seq., which was enacted for among other reasons to eliminate fraud and waste in the procurement process, the FAR would have two salutary effects, in addition to the primary benefit already discussed.

First, the FAR would unbundle the reimbursement rate and tie reimbursements to the cost of specific services. At present reimbursements are a percentage of premiums which, in turn, are a function of crop prices. Crop prices, however, are irrelevant to a contractor's costs and function. For example, the cost of data entry and transmission is a function of the number of documents and bytes of data processed and transmitted, not the premium those documents represent or the prices of the crops insured. Similarly, the cost of loss adjustment is a function of the severity and scope of a loss, not the premium charged on the damaged crops. In short, under the present reimbursement system, if crop prices are high, contractors may be unjustly enriched; if crop prices are low, contractors may be inadequately reimbursed. The FAR would eliminate both inequities.

Second, the FAR, would require contractors to disclose their potential profit and subject it to negotiation and regulation. With respect to profit, the FAR states, as here pertinent:

> "(b) It is in the Government's interest to offer contractors opportunities for financial rewards sufficient to (1) stimulate efficient contract performance, (2) attract the best capabilities of qualified large and small business concerns to Government contracts, and (3) maintain a viable

industrial base.

> "(c) Both the Government and contractors should be concerned with profit as a motivator of efficient and effective contract performance. Negotiations aimed merely at reducing prices by reducing profit, without proper recognition of the function of profit, are not in the Government's interest. Negotiation of extremely low profits, use of historical averages, or automatic application of predetermined percentages to total estimated costs do not provide proper motivation for optimum contract performance."

The FAR is "a single, simplified uniform Federal procurement regulation" that is to be complied with "by all Federal agencies," 41 U.S.C. § 405a; the purpose of the FAR is "to ensure effective and efficient spending of federal funds...," Executive Order 12352. To protect the Federal fisc, to discipline contractor spending and to better enforce its contracts, the FCIC should apply the FAR's cost principles to its contractors.

III. ONLY THE FCIC MAY MAKE ACTUARIAL DETERMINATIONS AND ESTABLISH PREMIUM RATES

Because the Federal crop insurance program is a domestic assistance program and federal funds subsidize both the premiums that policyholders pay and the indemnities that are paid to them, only the Federal Government may establish the criteria for participation in the program. Thus, only the FCIC may determine which crops and which land will be eligible for insurance, the premiums to be charged for that insurance, the terms and conditions of that insurance and the amount of indemnity that will be paid upon an insured loss. As explained below, those determinations are, by law, exclusive government functions.

OMB Circular A-76 (Revised, 1983), the precursor of which

was promulgated in 1955, establishes "Federal policy regarding the performance of commercial activities." OMB Circular A-76 states, as here pertinent:

> "5. Policy. It is the policy of the United States Government to:
>
> * * *
>
> "b. Retain Governmental Functions In-House. Certain functions are inherently Governmental in nature, being so intimately related to the public interest as to mandate performance only by Federal employees. These functions are not in competition with the commercial sector. Therefore, these functions shall be performed by Government employees.
>
> * * *
>
> "e. A Governmental function is a function which is so intimately related to the public interest as to mandate performance by Government employees. These functions include those activities which require either the exercise of discretion in applying Government authority or the use of value judgment in making decisions for the Government....Governmental functions normally fall into two categories:
>
> "(1) The act of governing; i.e., the discretionary exercise of Government authority. Examples include...management of Government programs requiring value judgments...; selection of program priorities;
>
> "(2) Monetary transactions and entitlements, such as tax collection and revenue disbursements; control of the treasury accounts and money supply; and the administration of public trusts."

Taking these provisions together, OMB Circular A-76 requires FCIC employees to perform all functions in the management of the Federal crop insurance program "which require either the exercise of discretion in applying Government authority or the use of value judgment in making decisions for the Government" or which involve "revenue disbursements [and] control of the treasury

accounts." By definition, which farmers and farms and which crops and counties are eligible for crop insurance, how much they will be charged and how much they will be subsidized, what records they must keep and what representations they must make, with what conditions they must comply, with what procedures they must follow and what benefits they will receive are all matters of "discretion" and "value judgment." And the FCIC, by statute, is charged with the management of a Government program requiring value judgments, 7 U.S.C. §§ 1501 et seq., and with responsibility for revenue disbursements and treasury accounts, see e.g., 7 U.S.C. §§ 1510 and 1516.[1]

On September 30, 1992, the Office of Federal Procurement Policy ("OFPP") published Policy Letter 92-1 on "Inherently Governmental Functions," 57 Federal Register 45096 et seq. The OFPP developed the Policy Letter in response to the concerns of executive agencies, the Congress and the General Accounting Office over "the propriety of awarding contracts for certain types of functions or administering contracts in certain ways." Id. As here pertinent, the Federal Register narrative

[1] Cogent to this matter are the words of the Supreme Court:

"...the [Federal Crop Insurance] Corporation is not a private insurance company....Government is not partly public or partly private, depending upon the governmental pedigree of the type of a particular activity or the manner in which the Government conducts it. The Government may carry on its operations through conventional executive agencies or through corporate forms especially created for defined ends." Federal Crop Insurance Corporation v. Merrill, 332 U.S. 380, 383-384 (1947).

accompanying the Policy Letter states:

> "Whatever the reason for using service contracts to accomplish agency missions, it is important to understand that agency use of service contracts is limited by our policy letter in two ways: the function must not be an inherently governmental function, and if it is not, the agency must be able to exercise effective oversight of any contract awarded. We make clear that management of a contract is just as important as deciding whether the contract may properly be awarded in the first place....we are concerned that service contracts, when used, are used only when contractors may perform the functions in question and when agencies have the resources to manage the contracts."

The Policy Letter itself states, as here pertinent:

> "An inherently governmental function involves, among other things, the interpretation and execution of the laws of the United States so as to:
>
> "(a) Bind the United States to take or not to take some action by contract, policy, regulation, authorization, order, or otherwise; [or]
>
> * * *
>
> "(c) Significantly affect the life, liberty, or property of private persons; [Id. p. 45100]
>
> * * *
>
> "APPENDIX A
>
> "The following is an illustrative list of functions considered to be inherently governmental functions:
>
> * * *
>
> "5. The determination of agency policy, such as determining the content and application of regulations, among other things.
>
> "6. The determination of Federal program priorities or budget requests."

By its terms, Policy Letter 92-1 includes actuarial determinations and rate setting within the meaning of inherently

governmental functions. Those determinations involve "the interpretation and execution of the [Federal Crop Insurance Act] so as to [b]ind the [FCIC] to take or not to take some action by contract [or] regulation." For example, the FCIC's actuarial determinations will determine whether farmers enter into insurance contracts and bind the FCIC to insurance or reinsurance. Whether crop insurance is available may determine whether a farmer will obtain operating loans from a bank or credit from a seed or chemical company and whether a crop will be planted or the farm land sold. Actuarial determinations "significantly affect the...property of private persons."

Similarly, the "determination of [FCIC] program priorities," i.e., whether a crop or county will be added to or deleted from the Federal crop insurance program, is a function of actuarial determinations and rate making. Indeed, whether the program will be actuarially sound and whether there will be widespread participation, the two mandates of the statute, are both the product of actuarial decisions.

Conversely, the business of selling and servicing crop insurance is a commercial activity. With respect to commercial activities, OMB Circular A-76 states, as here pertinent:

> "Rely on the Commercial Sector. The Federal Government shall rely on commercially available sources to provide commercial products and services. In accordance with the provisions of this Circular, the Government shall not start or carry on any activity to provide a commercial product or service if the product or service can be procured more economically from a commercial source.
>
> "A commercial activity is one which is operated by a

> Federal executive agency and which provides a product or service which could be obtained from a commercial source. A commercial activity is not a Governmental function. A representative list of such activities is provided in Attachment A. A commercial activity also may be part of an organization or a type of work that is separable from other functions or activities and is suitable for performance by contract." (Underscoring in original).

Next, Attachment A to the Circular includes in its itemization of "Examples of Commercial Activities" each of the components of a managing general agency's crop insurance business. These components include:

> "ADP services -- batch processing, time-sharing, facility management, etc.
> Programming and systems analysis, design, development, and simulation
> Key punching, data entry, transmission, and teleprocessing services
> Systems engineering and installation
> Equipment installation, operation, and maintenance
> Advertising and public relations services
> Financial and payroll services
> Debt Collection
> Word processing/data entry/typing services
> Mail/messenger
> Management information systems, products and distribution
> Financial auditing and services
> Compliance auditing
> Supply services"

Moreover, these costs and the costs of long-range market planning and sales are allowable costs for contractors under the FAR.

Cogent, too, is the analysis of Professor John D. Donahue. In his study, The Privatization Decision, Professor Donahue observed:

> "The more precisely a task can be specified in advance and its performance evaluated after the fact, the more certainly contractors can be made to compete; the more readily disappointing contractors can be replaced (or

> otherwise penalized); and the more narrowly government cares about ends to the exclusion of means, the stronger becomes the case for employing profit-seekers rather than civil servants." [p. 79-80; italics and underscoring deleted].

The multiple peril crop insurance business satisfies this formula for privatization.

IV. THE FCIC WOULD FURTHER REDUCE INDEMNITY OVERPAYMENTS BY FURTHER ASSERTING ITS REGULATORY AUTHORITY

On December 3, 1992, the General Accounting Office testified before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives. See, GAO/T-RCED-93-2. The focus of the GAO's testimony was a study by the Office of Management and Budget and an Interagency Task Force on civilian agency contracting. That study, subtitled "Improving Contracting Practices and Management Controls on Cost-Type Federal Contracts," examined 12 departments and agencies and $54 billion of civilian contracts.

In praise of that study, the GAO testified, as here pertinent:

> "...civilian agencies currently spend about $55 billion per year on contracts and have become increasingly dependent on contractors to help agencies manage and carry out their missions. Although contractors have an appropriate role to play in delivering needed services, once contracts are awarded federal agencies often focus more on accomplishing their programs' missions than on overseeing the quality and cost of completed work. Consequently, agencies have not effectively administered the contracts to control contractors' costs and performance....
>
> "Additionally, more thorough and timely contract auditing could help minimize government vulnerability to fraud, waste, and abuse. Currently, there is a significant backlog of audits of costs incurred by

> contractors. For example, according to the latest available information, the Defense Contract Audit Agency (DCAA), which performs the majority of audits for both defense and civilian agencies, had a backlog of approximately 13,000 incurred cost audits on contracts worth nearly $159 billion." GAO Testimony, pp. 1-2.

In keeping with the import and urgency of OMB's study and GAO testimony, the FCIC should immediately implement the following measures.

First, assuming the FCIC applies the FAR's cost principles to its contractors, at the end of each SRA contract year, the FCIC should conduct a so-called close-out audit of each contractor and recoup from them any monies not spent in accordance with the FAR's cost principles or the SRA's provisions.

Second, the FCIC should train for and transfer to its compliance division as many of its existing personnel as possible.

Third, the FCIC should increase, to the maximum extent possible, its audits of its contractors' loss adjustments and indemnity payments. In particular, the FCIC should require any contractor who pays a loss under a FCIC reinsured multiple peril policy to a policyholder who also has a private hail policy and/or companion policy under which no loss is paid on the same occurrence to report that payment immediately. The FCIC should audit that loss in the field immediately after the payment or, at the contractor's request, before the payment.

Fourth, the FCIC should increase its financial regulation of

its contractors. Contractors and managing general agencies should be required to file quarterly financial statements and the FCIC should not contract with or renew its contracts (or subcontracts) with any party that is not a "responsible prospective contractor" within the meaning of Subpart 9.1 of the FAR. Among other things, such a contractor must "have adequate financial resources," "have a satisfactory performance record," "have a satisfactory record of integrity and business ethics" and "have the necessary organization, experience, accounting and operational controls...or the ability to obtain them." 48 C.F.R. 9.104-1. And, as discussed below, the FCIC should assert jurisdiction over commercial reinsurers that participate in the Federal crop insurance program.

V. THE PROBLEMS OF REINSURANCE

Because the FCIC does not reinsure all of the risk on the multiple peril crop insurance policies that its contractors cannot retain, those contractors must purchase commercial reinsurance in the international insurance markets.[2] The need for and use of commercial reinsurance, however, exposes the Federal crop insurance program to two material risks.

First, because the capacity of commercial reinsurers to assume multiple peril underwriting risk is never open-ended, and

[2] Reinsurance, in a nutshell, is the transfer of risk by the insurance company that sold the policy to an insurance company that did not sell the policy for a share of the premium. Reinsurance permits the spreading of risk and allows companies to free surplus so more policies can be sold.

because the availability of any capacity is also dependent on the profits or losses that commercial reinsurers enjoy or suffer from their other lines of business, the widespread participation in the Federal crop insurance program that the Congress envisaged in 1980 may be limited and uncertain. In other words, to the extent the FCIC requires its contractors to rely on the commercial marketplace for reinsurance, the FCIC exposes the national welfare and the economic stability of our rural communities to the risks of the commercial marketplace. Accordingly, if the FCIC does not stand ready to provide the insurance or reinsurance that the commercial market cannot provide consistently, the Federal crop insurance program could be stifled.

Second, even if adequate commercial reinsurance is available, the commercial companies that offer reinsurance and the market in which they offer it are unregulated. The importance of reinsurance and the consequences of an undependable and unregulated market were described by the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, in its report, "Failed Promises: Insurance Company Insolvencies." As here pertinent, the Subcommittee found:

> "Although the concept of reinsurance is sound, problems have arisen in the insurance industry when a reinsurer is either unwilling or unable to pay its share of claims. This creates a chain effect of strain on the system, requiring the companies that were reinsured to pay the defaulting company's share. There is no formal system to regulate the solvency of reinsurance companies, and the existing system of letters of credit and trust funds intended to secure the performance of reinsurers has been woefully insufficient to cover

actual losses in the cases studied by the Subcommittee. [p. 10].

* * *

"Reinsurance is an essential function for spreading risk and expanding capacity in the insurance marketplace. This legitimate concept must be a reliable part of an open and competitive international market...." pp. 60-61.

If, as a result of a reinsurer's defalcation, a multiple peril crop insurance company was unable to pay its claims, the FCIC would be required by the SRA to assume direct liability to the policyholder. In many instances, the premium associated with those claims would already have been paid to the commercial reinsurer which likely would be beyond the jurisdiction of the FCIC.

To strengthen the Federal crop insurance program and to protect the Federal fisc, the FCIC might require all reinsurers of Federal crop insurance program risk to file periodic financial statements with the FCIC and to meet certain standards the FCIC promulgates. When warranted, the FCIC might also require off-shore reinsurers to maintain in the United States adequate surplus for the risks they reinsured.

VI. MISCELLANEOUS COST SAVING PROPOSALS

A. The FCIC could substantially reduce its loss ratio by limiting the availability of its 75 percent coverage to farmers whose losses were less than 75 percent of their premiums in the preceding year. Most of the FCIC's losses occur on policies insuring 75 percent of the yield but this level of protection

should be reserved for farmers whose risks warrant that degree of exposure.

B. Important administrative savings would be realized if the FCIC adopted its single policy proposal and all insurers were required to use the same application, policy and insurance forms. In addition, the FCIC should require policyholders and reinsured companies to settle their disputes through binding arbitration, thereby avoiding more expensive litigation.

C. The FCIC should not invest in a new computer system or other resources that duplicate those already available in the commercial sector and that can be employed pursuant to OMB Circular A-76.

D. Congress should authorize the FCIC to charge insurance companies filing fees for certain services just as the Securities and Exchange Commission and the Federal Reserve Board charge filing fees. For example, the FCIC should charge companies that sell multiple peril policies of their own design a percentage of their premium to compensate the FCIC for reviewing the policies which is a precondition to their sale. These fees would be excluded from the companies' expense reimbursements.

In closing, National Ag and other private sector participants could assist FCIC with reducing the ultimate cost of this program to the taxpayers, while maintaining the benefits originally deemed necessary by Congress. We look forward to working together to deliver a meaningful program supported by the Federal Government.

ANIMAL REPRODUCTION AND BIOTECHNOLOGY LABORATORY AT COLORADO STATE UNIVERSITY

WITNESSES

WAYNE ALLARD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

JUDSON M. HARPER, COLORADO STATE UNIVERSITY

Mr. DURBIN. Congressman Wayne Allard from Colorado is here with Dr. Judson Harper of Colorado State University.

Welcome.

Mr. ALLARD. Thank you, Mr. Chairman. It is good to be with you. I think the committee is showing some remarkable perseverance to still be working. It is getting late in the day and I congratulate you.

Mr. DURBIN. Well, it is one of the perks of this subcommittee.

Mr. ALLARD. It is good to see you again, Congressman Skeen.

Thank you very much for allowing me to come before the committee.

Mr. Chairman, I know the committee's time is at a premium so I will be brief.

As a member of the House Budget Committee, I know just how tight resources are going to be this year. In fact, you just alluded to them, and cutting the deficit is first and foremost in all of our minds.

However, having said that, Congress should still fund projects that are economical and will in the long run show a return greater than what was initially invested. Biotechnology research in general and particularly Colorado State University Biotechnology Lab meets that criteria.

What makes CSU's biotech lab proposal an economical investment is that the human research capability is already in place. The funding that is being asked for is to construct a new facility to replace the outdated one that researchers are currently working in. A new facility and equipment would cost $6.8 million. Half of that, $3.4 million, has already been appropriated by the state legislature and CSU is only seeking matching federal funds to complete this project.

Mr. Chairman, this is a worthy project. I hope the subcommittee and full committee look favorably upon this request.

I will yield now so Colorado State University's Vice President, Dr. Jud Harper, who is Vice President for Research at CSU, can give his presentation.

Mr. HARPER. Thank you very much.

I would like to begin by saying I appreciate the recognition that we received last year on our proposal to expand and renovate our animal reproduction and biotechnology laboratory.

As you may recall, a report was requested on this facility in the fiscal 1993 appropriations bill. We have completed this feasibility study and have submitted the necessary documents to CSRS and a site visit will take place April 20th, next month.

Colorado State University has consistently been at the forefront of animal reproductive biotechnology. This dates back to 1941 when my institution pioneered the work in artificial insemination, the

freezing of semen, moving on into embryo transfer work. That particular work has really stimulated a number of private industrial spinoffs that have had great benefit to United States animal agriculture.

The work now is going on beyond that to look at ways of improving reproductive efficiency and also looking at ways where the offspring are disease resistant, requiring less medication, providing a healthier, safer meat product, and increasing agricultural efficiency and productivity.

Our work is related to producing animals that grow faster on less feed, produce more muscle and less fat, have healthier offspring at the desired time of the year. The result is a safer, more nutritious and less costly food supply for Americans and improved competitiveness for American agriculture.

Now, our activity has been well recognized both nationally and internationally. We are recognized in Colorado by our Commission on Higher Education. As part of the Western Intercollegiate Higher Education Authority, we serve as its activity in animal reproduction and biotechnology.

This outstanding activity is impeded currently by the fact that our laboratory is old and outdated and really in three separate facilities located three or four miles apart. This proposal is directed towards correcting that particular issue by coming forth with a centralized facility that is 22,000 square feet that would house the current faculty and research associates and graduate students. It would also house the type of high tech equipment necessary to support a modern reproductive biotechnology activity.

The funds that we are seeking, as Congressman Allard spoke to, was a total funding of $6.8 million. Colorado State University and the state of Colorado have already set aside $3.4 million of this amount, or half that amount. We are requesting the other $3.4 million from the Federal Government to match the amount we have already set aside. This is a one-time request of funds and will greatly increase the productivity and the quality of an outstanding facility directed towards excellence in animal reproductive biology and biotechnology.

We are here because we have exhausted state and private financing and by necessity are turning to the Federal Government and asking that you become a partner in this project. It is a one-time request that we are making. Ongoing funds to operate the facility and its activities are in place.

We thank you very much for the opportunity to speak to what we believe is an outstanding and worthy program and we respectfully request your consideration.

Mr. DURBIN. Thank you very much, Dr. Harper and Congressman Allard.

I recall your testimony from last year. I recall that the subcommittee provided some money under Chairman Whitten for a feasibility study.

Mr. ALLARD. That is correct.

Mr. DURBIN. And we are awaiting word from the USDA in terms of what their recommendation is on this.

Mr. ALLARD. April 20th is when they are supposed to have the on-site inspection.

Mr. HARPER. That is correct.

Mr. ALLARD. And then as soon as that becomes available we can make that information available to you.

Mr. DURBIN. All right. Thank you very much.

Mr. Skeen?

Mr. SKEEN. Thank you, Mr. Chairman.

I just want to commend you on your work. I have never seen anybody work any harder than Wayne has and, Doctor, I appreciate your testimony, I think you make a great team.

Mr. HARPER. Thank you very much.

Mr. ALLARD. Thank you very much, Joe. Good to see you.

Mr. DURBIN. Thanks a lot.

Mr. ALLARD. Thank you.

[The information follows:]

THE TESTIMONY OF CONGRESSMAN WAYNE ALLARD
BEFORE THE APPROPRIATIONS SUBCOMMITTEE ON
AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATIONS
AND RELATED AGENCIES

MARCH 30, 1993

MR. CHAIRMAN I KNOW THE SUBCOMMITTEE'S TIME IS AT A PREMIUM SO I'LL BE BRIEF. AS A MEMBER OF THE HOUSE BUDGET COMMITTEE I KNOW HOW TIGHT RESOURCES ARE GOING TO BE THIS YEAR, CUTTING THE DEFICIT IS FIRST AND FOREMOST IN ALL OF OUR MINDS. HOWEVER, HAVING SAID THAT CONGRESS SHOULD STILL FUND PROJECTS THAT ARE ECONOMICAL AND WILL, IN THE LONG RUN, SHOW A RETURN GREATER THAN THE INITIAL INVESTMENT. BIOTECHNOLOGY RESEARCH IN GENERAL, AND PARTICULARLY COLORADO STATE UNIVERSITY'S BIOTECHNOLOGY LAB, MEETS THAT CRITERIA.

WHAT MAKES CSU'S BIOTECH LAB PROPOSAL AN ECONOMICAL INVESTMENT IS THAT THE HUMAN RESEARCH CAPABILITY IS ALREADY IN PLACE. THE FUNDING THAT IS BEING ASKED FOR IS TO CONSTRUCT A NEW FACILITY TO REPLACE THE OUTDATED ONE THAT RESEARCHERS ARE CURRENTLY WORKING IN. A NEW FACILITY AND EQUIPMENT WOULD COST $6.8 MILLION. HALF OF THAT, $3.4 MILLION, HAS ALREADY BEEN APPROPRIATED BY THE STATE LEGISLATURE, CSU IS ONLY SEEKING MATCHING FEDERAL FUNDS TO COMPLETE THIS PROJECT.

MR. CHAIRMAN THIS IS A WORTHY PROJECT, I HOPE THE SUBCOMMITTEE AND FULL COMMITTEE LOOKS FAVORABLY UPON THIS REQUEST. I'LL YIELD NOW SO CSU'S VICE PRESIDENT FOR RESEARCH CAN GIVE HIS PRESENTATION.

TESTIMONY OF COLORADO STATE UNIVERSITY
BEFORE THE HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON AGRICULTURE

March 30, 1993

Mr. Chairman and Members of the Subcommittee, my name is Judson M. Harper. I am Vice President for Research at Colorado State University. I appreciate the opportunity to appear before you today to testify on behalf of the fiscal year 1994 budget to support agricultural research programs. I will briefly summarize my remarks, but request that my complete testimony be incorporated in the record of proceedings before your Committee.

Colorado State University has appeared before this Committee in the past to discuss our priorities for continued excellence in agricultural research activities. I wish to continue discussing two matters that address the intersection of national needs with existing capabilities at Colorado State University.

Animal Reproduction & Biotechnology Laboratory

I appreciate the recognition we received last year for our proposal to expand and renovate our Animal Reproduction & Biotechnology Laboratory. As you may recall, a report was requested on this facility in the fiscal year 1993 appropriations bill. We have completed the feasibility study and have submitted the necessary documents to the CSRS. A site visit is planned for April 20-21, 1993.

Colorado State University has consistently been at the forefront of animal reproductive biotechnology. Since 1941, procedures initiated at the Animal Reproduction & Biotechnology Laboratory have significantly impacted the profitability of our agricultural economy. Researchers pioneered such techniques as freezing bull semen and performing non-surgical collection and transfer of bovine embryos. This latter methodology has been taught to hundreds of individuals spawning more than 14 private embryo transfer businesses in Colorado and 30 throughout the western United States. Trainees have come from 38 states and 11 foreign countries as part of a successful technology transfer activity. Our researchers were also the first to surgically split a horse embryo, resulting in identical twin foals. On-going research aimed at producing transgenic chickens and cattle that are genetically resistant to viral diseases will reduce the need for medications, prevent viral contamination of meat products, and lead to new approaches for disease control. Other work is related to producing animals that grow faster on less feed, produce more muscle and less fat, and have healthier offspring at the desired time of the year. The result is a safer, more nutritious and less costly food supply for Americans and improved competitiveness for American agriculture.

Our role in the international marketplace is evidenced by a continued stream of foreign visitors and buyers wishing to purchase the benefits of improved animal species. Chickens resistant to such diseases as Newcastle's, influenza, and infectious bronchitis, will have a major

effect on the sales of agricultural products to other countries. Likewise, cattle genetically resistant to such diseases as leukemia, hoof and mouth, and rinderpest will have enormous appeal and result in expanding exportation of American agricultural products to major world markets.

Colorado State University's excellence in improving animal reproduction methodologies is well substantiated. Faculty have national and international reputations for excellence in the areas of reproductive biology and genetic engineering of agricultural animals. They are leaders in teaching, service and outreach education, as is evidenced by a NIH training grant that has been funded continuously for 15 years. This group of faculty and students is unique because it blends an emphasis on enhancing the efficiency of livestock reproduction with basic research aimed at understanding the fundamental mechanisms of reproductive biology.

Current research goals include: (1) shortening the period of prepubertal, seasonal and postpartum anestrus in ewes and cows; (2) reducing embryonic wastage; (3) enhancing sperm production; (4) producing transgenic animals that are genetically resistant to disease; and (5) improving methods for gamete preservation, *in vitro* fertilization and embryo transfer.

Future research will focus on: (1) enhancing the reproductive efficiency of farm animals; (2) developing treatments for infertility and contraception; and (3) developing methods to control unwanted populations of wild horses, burros, pet animals, and some wildlife species.

The Animal Reproduction & Biotechnology Laboratory is an institutional priority at Colorado State University. The Western Interstate Commission on Higher Education (WICHE) designated the program of the Animal Reproduction & Biotechnology Laboratory as the regional program for graduate education in animal reproduction and animal biotechnology. Additionally, the Laboratory was named a "Program of Excellence" by the Colorado Commission on Higher Education. This designation provides funds for graduate education, equipment, sabbatical leaves for faculty, and partial start-up funding for a new, named professorship in animal reproduction.

The single impediment to optimum performance at the Laboratory is its three overcrowded and outdated facilities that are separated by three to four miles. This lack of centralized facilities has hampered interaction between faculty and trainees, resulting in major problems of communication and inefficiency.

Plans have been developed for a new 22,000 square foot research building to be adjacent to existing facilities currently utilized for embryo transfer in large animals. The new facility would provide research laboratories and office space for faculty, graduate and postdoctoral students, technical and support personnel. It would provide modern laboratories equipped with essential items such as an oligonucleotide synthesizer, electron microscope, ultra-centrifuges, microinjection facilities, analytical instruments, and cell culture rooms. In addition, portions of the existing facility would be renovated to bring 1,400 square feet of space for research animals up to American Association for Accreditation of Laboratory Animal Care standards.

This new facility would allow all faculty, graduate students, research associates and postdoctoral fellows, and technical and administrative staff to be housed at a single location. A

single facility will dramatically enhance scientific interactions and result in more efficient and higher quality research.

The total cost for construction and renovation is $6.8 million. Colorado State University has already set aside $3.4 million. We are requesting $3.4 million from the federal government to match the amount we have already set aside. This one-time request for funds will greatly support and increase the productivity of this Laboratory which consistently demonstrates excellence in animal reproductive biology and biotechnology. We have exhausted state and private financing and, by necessity, are turning to the federal government and asking that it become a partner in this one-time project. On-going operating funds for the facility and its activities exist and are not being requested.

I am very cognizant of the severe budget constraints under which this Committee is operating. However, an investment in the outstanding research undertaken at the Animal Reproduction & Biotechnology Laboratory will produce returns for many years to come. The President, in his "Vision of Change for America", spoke of the importance of technology transfer and investing in research where the results will be immediately absorbed into improving the lives of Americans. The instances of technology transfer that can be credited to Colorado State University in the field of animal reproductive biology are far too many to enumerate here, but are represented by the many examples provided earlier in my testimony.

We are hopeful that the Committee will consider all of these facts when allocating its scarce resources this year, and provide the total requested, $3.4 million, for the Animal Reproduction & Biotechnology Laboratory.

Russian Wheat Aphid Research

Last year I came before this Committee to request continuation of funding for Russian wheat aphid research.

The Russian wheat aphid, first discovered in North America in 1986, has rapidly become the most important insect pest of wheat and barley in the western United States. Its accumulated total economic impact is estimated to be in excess of $657 million. Since 1986, approximately 17.5 million pounds of insecticides have been used nationally for Russian wheat aphid control. The cost to American farmers of applying these insecticides was over $70 million. In addition, the use of insecticides on a crop that previously received little insecticide treatment raises concerns about the impact on water quality, human health, food safety and general environmental quality.

The impact of the Russian wheat aphid has been especially severe in Colorado because of the state's geographic location, climate and cropping system. Of the total 17.5 million pounds of insecticides used for Russian wheat aphid control, one-third was applied in Colorado. The cost to farmers in Colorado for insecticide application and crop loss since 1986 is in excess of $95 million.

Because of the severity of the problem in Colorado, a Russian wheat aphid research project was initiated at Colorado State University in 1987. Since the project's inception, the Colorado Legislature has appropriated $1.9 million in new funding, and the University has reallocated $325,000 annually of its own resources. This amounts to an annual expenditure of $765,000 toward developing environmentally responsible solutions to the Russian wheat aphid infestation problem is the largest of any state.

Although there has been substantial investment by the State of Colorado, Colorado State University and other agencies, several critical areas of research cannot be addressed because of inadequate funding. As you may recall, this Committee appropriated a total of $3 million for Russian wheat aphid research in fiscal year 1990. Of this amount, $2.4 million was allocated to APHIS to support biological control efforts, $200,000 was allocated to ARS, and $350,000 was divided among the states of California, Idaho, Oregon and Washington. I appeared before this Committee as you considered the fiscal year 1992 budget, and requested that some monies be made available for the on-going research in Colorado. With thanks, we noted that $430,000 was appropriated in the fiscal year 1992 bill to be divided among the States of California, Idaho, Oregon, Washington and Colorado. In your fiscal year 1993 appropriations bill, an identical sum was allocated to these same states; unfortunately, the final conference report excluded Colorado from access to these research monies. We have been able to continue our important research on a much reduced scale because of a subcontract with the land-grant university in the State of Washington; a testament, I believe, to the quality of our research and to the important role that Colorado State University fills in this eradication effort. I come before you today and request, once again, that you strongly endorse this program and allocate resources to be made available to the five states, including the State of Colorado, who are dealing with the Russian wheat aphid infestation.

This concludes my remarks. I am happy to answer any questions.

PLANT PROTECTION AND QUARANTINE PROGRAM

WITNESS

STANLEY H. FREIHOFER, NATIONAL ASSOCIATION OF AGRICULTURE EMPLOYEES

Mr. DURBIN. Our last witness is Stanley Freihofer. Is that right?

Mr. FREIHOFER. Yes, sir. Very good.

Mr. DURBIN. How about that. National Association of Agriculture Employees.

Welcome.

Mr. FREIHOFER. I would like to thank you for the opportunity to address you.

Mr. DURBIN. Thank you for your patience in waiting.

Mr. FREIHOFER. No problem. I certainly understand.

I shall be brief.

Mr. DURBIN. Thank you.

Mr. FREIHOFER. I am appearing today before you as the president of the National Association of Agriculture Employees. We are the union which represents the bargaining unit employees for Plant Protection and Quarantine, which is under the Animal and Plant Health Inspection Service, which is, of course, under USDA.

The reason I am here is because we have perceived a declining ability of the agency to maintain an effective pest exclusion program and it has kind of got us worried.

The cause is, first of all, staff year ceilings. In fiscal year 1992, the agency was not allowed to hire and for fiscal year 1993 and 1994, they have been authorized almost 350 additional positions but they cannot hire anybody because now they do not have any money, which creates a real problem when it comes to personnel. We end up losing leave and whatever else because we cannot staff.

What results from this budgetary starvation is an increasing possibility of leakage in the network for pest exclusion because we get stretched thinner and thinner and we have a decreasing ability to combat the resulting outbreaks because we have a shrinking—well, I should not say shrinking but we have a greater responsibility with no greater resources.

If you are waiting for good news, I have it for you. It does not require any additional appropriation of taxpayer dollars. What we see as a solution is for the agency to be allowed greater access to the user fees which have been and are being collected by the users of our services.

Right now, there is a $31 million surplus, I believe, it stands at present between what has been collected by the agency versus what they have been allowed to operate with, which means in effect that the people who are paying the user fees are paying for services that they are not receiving because the agency cannot hire so they cannot staff.

And that is the point I am here to make.

Mr. DURBIN. Okay. Let me, if I can, in the interest of time—we addressed this with the agency and they, I believe, told us that they had collected more user fees than they thought they would and were going to adjust the user fee.

Mr. FREIHOFER. They adjusted the collection. That is true.

Mr. DURBIN. I think they were even talking about adjusting the rate they were going to charge or the fee that was going to be charged. If I am not mistaken, there is some controversy involved here, particularly with the airline industry.

Mr. FREIHOFER. Well, I am not aware of the inside but——

Mr. DURBIN. Well, I would just tell you that this agency is empowered to collect these user fees and the folks in the airline industry feel that they are being put upon and too many fees are being collected. The agency conceded that it had more user fees than it could justify under its budget and said it would adjust those in the future.

You are suggesting that they could use that surplus in user fees to put more personnel in place.

Mr. FREIHOFER. I am saying that they need more personnel.

Mr. DURBIN. Okay.

Mr. FREIHOFER. When I am not wearing my union hat, I am wearing a badge, you know? I am one of those guys. I am a PPQ officer when I am not representing the employees. And I can tell you that it gets pretty tight.

I realize every agency probably comes to you with the same kind of problem but what I am saying is that I do not see that it would take any additional input of taxpayer money, that basically we are looking to have the users of the service pay for the service. They have been paying for service that they have not been getting.

Now, correct me if I am wrong, but my understanding is that the agency is given the authority to collect fees first and then second in the appropriations act they are given the authority to spend the money. But they are not given the authority to spend what they collect, obviously, and that is what resulted in the surplus, that what they were allowed to spend was far less than what was actually generated. That resulted in the surplus.

Mr. DURBIN. We put a limitation through the committee as to how much user fees they can use in the agency.

Mr. FREIHOFER. Right.

Mr. DURBIN. So you are correct in your conclusion.

Mr. FREIHOFER. But I think a lot of the projections were based on, I believe, fiscal year 1992, in which case there was a—what do they call it—staff year ceiling. The agency could not hire even though they may have had access to the money to hire, they could not hire. I do not think that staff ceiling is put on by this committee.

Mr. DURBIN. No, that is probably OMB.

Mr. FREIHOFER. What I am saying is that artificially suppresses their needs, their fiscal needs.

Mr. DURBIN. I think your analysis is right. We will take a look at it. Keep in mind that when it comes to these staff ceilings, that is beyond us.

Mr. FREIHOFER. I understand that. But, see, now, the department has given the agency the authority to hire, I think it is 347 total, the figures are in the handout. They have given them the authority to hire more personnel because they recognize the need and now we cannot afford to hire.

Mr. DURBIN. I follow you.

Mr. FREIHOFER. Okay.

Mr. DURBIN. We will take a look at it.

Mr. FREIHOFER. All right.

Mr. DURBIN. Mr. Skeen?

Mr. SKEEN. Thank you, Mr. Chairman.

I have no questions other than I think it is a problem that has a solution. Maybe we can get the interested parties, including Congress and OMB and the rest of them, together and sit down.

I appreciate very much your appraisal of just how demanding the job is and we understand. But generally, most agencies take care of personnel and staffing problems first. This is a little strange to find one that is that labor intensive that they have not taken care of the personnel.

Mr. FREIHOFER. I believe the lion's share of our budget for PPQ goes to personnel for the AQI program.

Mr. SKEEN. The AQI program or other programs in the PPQ.

Mr. FREIHOFER. There are a lot of domestic programs like Witch Weed and Grasshopper and there are emergency programs like Med Fly.

Mr. SKEEN. I am familiar with the Grasshopper program.

Mr. FREIHOFER. Well, there are a bunch of them.

Mr. SKEEN. But they are all in the same strain.

Mr. FREIHOFER. They are all performed by PPQ officers.

Mr. SKEEN. I see.

Mr. FREIHOFER. But they are not all AQI work. I mean, AQI is the port of entry.

Mr. SKEEN. Yes, sir. I understand.

Mr. FREIHOFER. Basically, I always say we are like Customs except they do drugs, we do bugs. That is basically the way it is. We do the same things Customs does. We do cargo inspection, we do boardings, we do passenger examinations, baggage, all of that.

Mr. SKEEN. Thank you.

Mr. FREIHOFER. Thank you.

Mr. DURBIN. Thanks for your testimony.

Mr. FREIHOFER. I appreciate you allowing me.

[The information follows:]

PREPARED TESTIMONY OF

STANLEY H. FREIHOFER

FOR

UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON APPROPRIATIONS FOR

AGRICULTURE, RURAL DEVELOPMENT, AND

FOOD AND DRUG ADMINISTRATION, AND

RELATED AGENCIES

MARCH 30, 1993

TESTIMONY OF STANLEY H. FREIHOFER, PRESIDENT, NATIONAL ASSOCIATION OF AGRICULTURE EMPLOYEES

My name is Stanley H. Freihofer. I am President of the National Association of Agriculture Employees (NAAE). NAAE is the exclusive representative for the bargaining unit employees of the United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine (USDA, APHIS, PPQ). The bargaining unit consists of all permanently employed professional PPQ Officers of which there are more than 1200 at present.

Our Agricultural Quarantine Inspection (AQI) program is charged with protecting the agricultural industry of the United States from the introduction of harmful plant or animal pests and diseases from foreign sources. Our operations are based on sound scientific principles and proven quarantine practices. Our Officers are dedicated professionals.

In the performance of our duties in the AQI program, the PPQ Officer must have a knowledge and understanding of Botany, Taxonomy, Plant Pathology, Entomology, Nematology, animal disease transmission vectors, and quarantine procedures. We must know and understand empowering legislation and the resulting regulations.

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We have become increasingly concerned with the gradual decline in the Animal and Plant Health Inspection Service's (APHIS) ability to support required exclusion procedures which directly protect United States agriculture. This decline has two principal causes: the limitations imposed by staff-year ceilings and less-than-adequate budgetary resources. These constraints adversely impact not only the PPQ Officer, but also the public and the agricultural industry of the United States, all of whom we defend.

NAAE had hoped that, with passage of User Fee collection authority, the Agency's resource short-falls would be alleviated. Unfortunately, we are now told actual spending authority is tied directly to the budget limitations contained in the annual Appropriations Act. Although the Agency has authority to establish and collect user fees, it has been given strictly limited access to the revenues collected.

The following example illustrates the problems caused by this spending restriction: During Fiscal Year (FY) 1992, the strict enforcement of staff-year ceiling limitations made the hiring of additional PPQ Officers virtually impossible. Given suppressed staffing, authorized budget levels for the AQI program under PPQ appeared sufficient. In fact, however, the

budget authorization was significantly less than actually needed to perform minimum AQI services.

The PPQ Officers who we represent have felt the results of the ongoing budget crunch. Educational requirements for new-hires have been cut. On-the-job training has decreased to near non-existence. More positions, when filled, are filled with untrained Aides and Technicians, resulting in an overall de-professionalization of the workforce. Needed positions go unfilled, resulting in excessive overtime demands, denial of leave requests, and refusal to permit transfers or temporary duty assignments. Needed equipment, such as x-ray machines, is lacking or in poor repair. As we continue to try to maintain pest exclusion while ill-equipped and under-staffed, stress increases and morale declines.

The Department, fully recognizing the impact of the AQI personnel shortages, provided staff-year ceiling relief sufficient to hire 264 PPQ Officers for Fiscal Year (FY) 1993, and an additional 83 PPQ Officers for FY 1994. The Agency, because of severe budget restrictions, can not fill even one of these authorized positions. The Agency will soon find itself almost 30% understaffed.

Continuing budgetary starvation produces increased delays in the processing of passengers and cargo and, concurrently,

decreased success in pest exclusion, as our nets are stretched ever thinner. Our ability to respond in emergencies to control or eradicate the ensuing outbreaks of introduced agricultural pests will decline as our workforce becomes increasingly de-professionalized, poorly trained, and over-extended.

The means to avoid this breakdown are presently available. They require no increase in taxpayer funding. Sufficient revenues are generated and collected through the AQI User Fee authority. Current estimates are that the User Fee collections now exceed the appropriated AQI budget authorization by $31 million. The Agency can not directly access these revenues, however, and may only spend up to the AQI budget level provided in the Appropriations Act.

The irony of the situation is this: the Agency has not been given sufficient budget authority to access the User Fees collected, resulting in a $31 million surplus; as a result of this surplus, the Agency's authority to collect User Fees has been reduced even further because the Agency's budget authority also has been reduced; therefore, the Agency's User Fees surplus will continue to grow while the Agency's ability to provide a level of service commensurate with the user fees paid and needed to protect U.S. agriculture continues to decline.

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This Subcommittee has the authority to alleviate this Catch-22 without appropriation of taxpayer dollars. It must grant the Agency access to User Fee money which has been and is being collected. We urge you to do so.

On behalf of the PPQ Officer, the public, the agricultural industry of the United States, and the National Association of Agriculture Employees, I thank you for your assistance in addressing these pressing concerns.

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WEDNESDAY, MARCH 31, 1993.

PORK RESEARCH

WITNESS

JULIE MASCHOFF, NATIONAL PORK PRODUCERS COUNCIL

Mr. DURBIN. We reconvene this meeting of the Appropriations Subcommittee on Agriculture for public witnesses and I would like to call first from the National Pork Producers Council Julie Maschoff.

These are the good pork producers. That is right.

Ms. MASCHOFF. Are there any other kind?

Mr. DURBIN. No, not on this committee.

Ms. Maschoff, we are happy to have you here and I might let my colleague from New Mexico know that I was fortunate enough to tour the Maschoff pork operation near Posie, Illinois and I think you may be the first witness from Posie, Illinois before this committee.

Ms. MASCHOFF. Mr. Chairman and members of the subcommittee, my name is Julie Maschoff. I am a pork producer from Carlisle, Illinois.

On behalf of the National Pork Producers Council, I would like to thank you for giving me this opportunity to testify. I will confine my comments to the allotted time but would ask that I might submit our written testimony for the record.

N.P.C.C. represents the nation's pork producers through 45 affiliated state associations. Our members account for more than 90 percent of the commercial pork production in the United States.

The economic impact of the pork industry on America is immense. The value added nature of pork production creates jobs and economic activity well beyond the farm to thousands of rural communities like Posie through added processing, distribution and other industry inputs.

Pork producers contribute more than $11 billion to our nation's economy while the retail value of pork sold at the consumer level contributes more than $30 billion.

Farm receipts from hogs place the pork industry in fourth position among all farm commodities, yet we receive no federal subsidies or price supports.

America's pork producers appreciate your past support of this subcommittee in helping us to improve the nutritional profile of pork and increase our industry's competitive position in the international marketplace.

Mr. Chairman, I would like to focus my comments this afternoon on four industry priorities: trade, environment, disease control and research.

N.P.P.C. believes the future of American agriculture depends on an aggressive and effective value added export trade policy. The value added sector is the fastest growing agricultural market. In 1992, this sector represented $210 billion in the world trade. Presently, the U.S. controls only 10 percent of this world market. In contrast, the European Community now controls more than 50 percent.

A key element of an aggressive, value added export trade policy is adequate funding of the market promotion program. Targeted foreign market development initiatives like this program have helped our industry increase value added exports of pork more than 50 percent since 1991.

N.P.P.C. requests $147.7 million as provided for in President Clinton's proposal to be appropriated for market development initiatives under the market promotion program.

Another priority is the environment and our producers recognize the important role that we as members of the agricultural community must play in protecting our environment. We are environmentalists.

The ASCS Water Quality Incentive Program provides assistance to producers who are willing to adopt new practices that help enhance water quality. NPCC requests $50 million be appropriated for assistance under this program.

A third priority concerns disease control. The ten-year national Pseudorabies Control and Eradication Program has made progress. However, present federal funding of this program falls short of the projected ten-year funding level by nearly $20 million. Continued underfunding delays eradication progress and increases the overall costs of the program.

Approximately $3 million is earmarked for the psuedorabies program under Animal Health Monitoring and Health Surveillance in the APHIS budget. NPPC requests an additional $13.5 million in APHIS appropriations for the pseudorabies program for a total request of $16.5 million.

Our fourth priority is research. Our industry's top facility priority is the National Pig Research Center in Ames, Iowa. The laboratory and farm facilities of the center will be located and constructed for optimal integration with ongoing research at the National Soil Tilth Laboratory and Iowa State University. NPCC requests $13 million be appropriated for the continued development and first phase construction of the National Pig Research Center.

Second, the upgrading of the Necropsy Incinerator Facility at the National Animal Disease Center is critical. NPCC requests $3.9 million be appropriated to upgrade the incinerator.

And, finally, important swine research like animal care, odor manager and nutrient utilization are all issues that are critical to the continued growth of our industry. I ask the subcommittee to review our written testimony for a more detailed understanding of our industry's research needs.

I would like to conclude with one point. America's pork producers are willing to share in the economic sacrifice that President Clinton has asked all of us as Americans to help restore the fiscal soundness of our country. However, we hope the economic sacrifice

will be spread fairly and proportionately across all segments of our economy.

Mr. Chairman, I would be please to answer any questions that the subcommittee may have.

Mr. DURBIN. Thank you very much.

I might mention to you that the money that you have requested for the necropsy incinerator is included in the president's stimulus package so we will know, I hope, soon what the Senate is going to do with it. We are hoping that they will pass it and we will be able to give you good news on that aspect.

One of the things I noticed in visiting your operation was your attentiveness to the whole environmental question and the efforts that have been taken in your operation to not only comply with the law, but to try to anticipate where we might be headed.

You and I have spoken from time to time about ways that the Federal Government can help people in the pork industry to be more responsive to environmental needs. If you could share a few of those with the committee now, I think it would be helpful.

Ms. MASCHOFF. You would like me to share ideas that we are currently practicing in our farm operation?

Mr. DURBIN. Well, once you talked to me about cost sharing in some of the Clean Water Act provisions.

Ms. MASCHOFF. Right. Under Section 319. And the water quality incentive program that I have mentioned in our testimony and that we have written in more detail about in our written testimony is a good example.

Under this program, local units of government can do research for local watershed projects. We have one in Clinton County that is helping dairy farmers monitor and control livestock waste to be more effective in maintaining water quality that municipalities also utilize.

As long as we have programs like this from the Federal Government, you will find producers are more than willing to work together with the Federal Government in ensuring that our water quality is maintained and enhanced.

Mr. DURBIN. We talked about that with the Soil and Conservation Service yesterday and where our money is best invested to get the most environmental bang for the buck. I think that this approach that you have just described is one that we should be encouraging.

I also find it interesting that we are moving toward being a net exporter of pork in 1993. I would have assumed that we were net exporters of pork at this point.

Ms. MASCHOFF. No, we are not. And we are the least cost producer in the world and that is why the market promotion program is so important.

We cannot compete without the Federal Government standing behind us in the world marketplace. With your help, we can be that net exporter this next year.

Mr. DURBIN. We will work on it.

Mr. Skeen?

Mr. SKEEN. Thank you, Mr. Chairman.

I am delighted to hear your testimony today. You know, we take the assumption that American businesses are not really interested

in environmental problems and that is not true. I think most responsible businesses, and I think pork producers are a good example of that, think that a good environment is good business. And I want to compliment you on your approach and thank you very much for testifying that American business is not interested just totally in a good profit. Of course, we need to stay in business; we are also interested in taking the responsibility for keeping the environment safe.

Thank you.

Ms. MASCHOFF. Thank you, Congressman Skeen.

Mr. DURBIN. Thanks for joining us. We appreciate it very much.

[The statement of Ms. Maschoff follows:]

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Statement of the

National Pork Producers Council

Before the

Subcommittee on Rural Development,
Agriculture, and Related Agencies

Committee on Appropriations

United States House of Representatives

on the

1994 Fiscal Year Agriculture Appropriations Bill

Presented by:

Julie Maschhoff
on Behalf of the
National Pork Producers Council

March 31, 1993

National Headquarters
P.O. Box 10383 • Des Moines, Iowa 50306 USA • (515) 223-2600 • FAX (515) 223-2646

The Other White Meat.

Mr. Chairman and Members of the Subcommittee:

On behalf of the National Pork Producers Council (NPPC), I thank you for giving the U.S. pork industry this opportunity to submit testimony regarding the 1994 Fiscal Year Agriculture Appropriations Bill. NPPC represents the nation's pork producers, and draws its strength from its grassroots through 45 affiliated state associations. Our members account for more than 90 percent of the commercial pork production in the United States and have diverse interests that include agricultural research, production, and marketing. The economic impact of the pork industry on rural America is immense. The value-added nature of pork production creates jobs and economic activity well beyond the farm to thousands of rural communities. The economic multiplier effect of a value-added product like pork significantly increases economic activity due to added processing, distribution and other industry inputs. Pork producers directly contribute more than $11 billion annually to our nation's economy, while retail value of pork sold at the consumer level exceeds $30 billion. Farm receipts from hogs place the industry in 4th position among all farm commodities yet we receive no direct federal subsidies or price supports.

America's pork producers greatly appreciate the past support of this Committee and other members of the House in helping address the critical issues facing the pork industry. This Committee's support helped our producers dramatically improve the nutritional profile of pork and increase our industry's competitive position in the international marketplace. We realize the Committee is faced again this year with the difficult task of allocating limited resources to a growing number of priorities. Therefore, we hope our testimony is useful to you in identifying priority areas critical to the continued growth of the U.S. pork industry.

ANIMAL & PLANT HEALTH INSPECTION SERVICE (APHIS)

Pseudorabies Control and Eradication Program -- The 10-year national control and eradication program for pseudorabies (PRV) has made some progress in meeting its surveillance and herd-cleanup objectives. Presently, federal funding of the PRV eradication program falls short of the projected 10-year funding level by nearly $20 million. Producers are bearing the major cuts of this program, but federal underfunding is delaying progress on eradication and increasing total program costs. An increase in funding from last year's $8.285 million would be used to assure states meet program goals together.

If states are not able to move together through the program, interstate movement of pigs are restricted and eradication efforts from one state may be at risk if a neighboring state is not moving forward as rapidly. If federal spending is not increased, we may lose the support of states and producers who have played a vital role in developing this cooperative program. Continued underfunding of the PRV program will stretch the eradication beyond the 10-year goal.

Approximately $3 million is earmarked for the PRV Program under Animal Health Monitoring and Surveillance in the APHIS budget in addition to the line item for pseudorabies. NPPC requests an additional $13.5 million in the APHIS appropriation for the PRV budget line item for a total request of $16.5 million to

allow a $3 million increase in surveillance funding to detect infected herds. The rest of the additional funds would allow an increase in the number and timeliness of implementation of herd cleanup plans.

Swine Brucellosis Eradication Program -- Swine brucellosis is a serious disease that prohibits profitable swine production due to abortions, breeding inefficiency and reduced litter size. This APHIS program has achieved some success by eradicating the disease from the major swine producing states. NPPC requests $600,000 be included in the APHIS appropriation for ongoing swine brucellosis eradication efforts.

AGRICULTURAL RESEARCH SERVICE (ARS)

National Pig Research Center -- We appreciate the past support of the Committee in providing design and planning money for the National Pig Research Center. It is the industry's top facility priority. When completed, it will address emerging environmental management, animal well-being, and management research issues. This research cannot effectively be done at either the USDA's Beltsville Laboratory or the ARS's Meat Animal Research Center. The laboratory and farm facilities of the Center will be located and constructed for optimal integration with ongoing research at the National Soil Tilth Laboratory and Iowa State University. NPPC requests $13 million be included in the ARS appropriation for the continued development and first phase construction for the National Pig Research Center.

National Animal Disease Center Necropsy Incinerator Facility -- The upgrading of the Necropsy Incinerator Facility at the National Animal Disease Center (NADC) in Ames, Iowa is also a high priority of the pork industry. The facility continues to deteriorate and has been cited for air quality violations. The problems with the facility expose ARS to increasing liability with respect to the health and safety of facility employees. The NADC is conducting pseudorabies, salmonella vaccine, and other disease research critical to the pork industry. If the incinerator is not upgraded, key research projects could suffer significant setbacks. NPPC requests $3.9 million be included in the ARS appropriation to upgrade the necropsy incinerator.

Animal Well-Being Research -- Another top priority of pork producers is important research on animal behavior, production equipment and management systems that will greatly enhance animal well-being. Last year the Committee directed $500,000 to ARS for animal well-being research at Purdue University. NPPC supports this vital research and requests $1 million be included in the ARS appropriation for this ongoing animal well-being research.

Meat Animal Research Center -- NPPC requests full funding for the Meat Animal Research Center in Clay Center, Nebraska. The Center continues to conduct vital research work for the livestock industry.

COOPERATIVE STATE RESEARCH SERVICE (CSRS)

National Research Initiative -- The National Research Initiative Competitive Grants Program (NRICGP) supports a spectrum of research ranging from basic fundamental questions relevant to agriculture in the broad sense to research that

bridges the basic and applied sciences and results in practical outcomes. In FY 1993, the NRICGP received an appropriation of $97.5 million, including $24.6 million for animal related research and $3.13 million specifically for swine research. This research addresses many topics of interest to the livestock and pork industry. The pork industry requests closer coordination with CSRS in targeting NRI to specific pork industry research priorities. NPPC requests at least $200 million for the National Research Initiative Competitive Grants Program appropriation to support high priority agricultural, food and environmental research.

The University of Minnesota Swine Research Center -- NPPC supports the University of Minnesota Swine Research Center's ongoing disease and production research. Federal funding will be useful in expanding current research into broad, multi-disciplinary studies of problems facing the pork industry. This type of cooperative project -- involving producers, university researchers and the USDA -- deserves continued federal funding. NPPC requests $140,000 be included in the CSRS appropriation to continue this research.

Swine Facility Environmental Management Project – Indoor air quality and swine odors affect producer safety, animal well-being, and neighbor relations. Research in this area is limited. NPPC supports a joint research project, administered by the University of Illinois, that will conduct environmental health and safety research related to the pork industry. The project, supported by Iowa State University, the University of Minnesota, South Dakota State University, and the University of Nebraska, will provide answers to producers that may preempt the need for future air quality regulations. NPPC requests $2 million be included in the CSRS appropriation for the first phase of this five-year research project.

EXTENSION SERVICE (ES)

Integrated Swine System Proposal -- Public interest concerning the impact of animal agriculture on the environment has escalated in recent years. Pork producers have become proactive in this area and have funded environmental research to control odor while maximizing the nutrient utilization of swine manure. NPPC requests $200,000 be included in the ES appropriation to conduct important environmental research at Kansas State University.

Sustainable Agriculture Programs -- The Sustainable Agriculture Title of the Food, Agriculture, Conservation, and Trade Act of 1990 (1990 Farm Bill) included formal authority for the Extension Service's Integrated Management Systems (IMS) Program. This program provides producers the opportunity to improve the environmental management of their operations while maintaining farm profitability. The purpose and approach to sustainable agriculture found in Chapter Two of the Title is sufficiently different from the existing LISA program authorized in Chapter One. Supporters of Chapter Two have worked to maintain the integrity of this program separate from Chapter One. The 1990 Farm Bill provided explicit authorization to Extension for administering the IMS program. NPPC requests $10 million be included in the ES appropriation to carry out the IMS Chapter of the Farm Bill. NPPC also requests $20 million included in the ES appropriation for Chapter Three funding.

FOREIGN AGRICULTURAL SERVICE (FAS)

Value-Added Exports -- NPPC believes that the future of American agriculture depends on an aggressive and effective value-added export trade policy that provides the tools to allow U.S. value-added products, such as pork and pork products to compete in foreign markets. The value-added sector is the fastest growing agricultural market. In 1992, this sector represented $210 billion in world trade. Presently, the U.S. controls only 10 percent of the total world market share for processed and value-added agricultural exports, while the European Community now controls more than 50 percent of the world market share.

The U.S. must enact a long-term, market development strategy for value-added and high value products, not short-term responses to unfair trade practices. Development programs with the greatest potential include the GSM-102 and GSM-103 credit programs, the Export Enhancement Program, P.L. 480, Food for Peace and the Cooperator Program, to name a few. Increasing value-added agricultural exports mean greatly expanded economic activity, increased tax revenues, as well as new jobs in America's rural communities.

Market Promotion Program -- A key element of an aggressive, value-added export strategy is adequate funding of the Market Promotion Program. The U.S. pork industry is experiencing unprecedented export growth. 1992 pork exports to foreign markets, up 40 percent from 1991. The U.S. pork industry's goal is to become a net exporter of pork in 1993. Targeted foreign market development, the kind provided by MPP, is critical if we hope to reach this goal. These expanded exports make an important contribution to our nation's balance of trade and to our national economy. Aggressive marketing and a strategic alliance between the public and private sector are necessary to ensure market access and a chance to compete in foreign markets. NPPC requests at least $147.7 million be included in the FAS appropriation for continued foreign market development initiatives under the Market Promotion Program.

AGRICULTURAL STABILIZATION & CONSERVATION SERVICE (ASCS)

Water Quality Incentive Program -- The Water Quality Incentive Program (WQIP) is one of the pork industry's top priorities. The WQIP provides incentives to producers who are willing to adopt new practices that enhance water quality. The incentive payments help producers implement practices that go beyond what is required under present law. NPPC requests $50 million be included in the ASCS appropriation for the WQIP.

FOOD SAFETY & INSPECTION SERVICE (FSIS)

Meat & Poultry Inspectors -- Consumer confidence in the overall safety of their food is a major concern for the U.S. pork industry. The federal meat and poultry inspection system must provide the necessary assurances to consumers that only safe, wholesome, and properly inspected products are being sold. NPPC supports Secretary Espy's request and the President's proposal for an additional $4 million in the FSIS appropriation to hire an additional 160 meat and poultry inspectors. We also support a major research initiative to isolate and reduce the level of food-borne pathogens.

Meat & Poultry Inspection Fees -- NPPC has joined a large cross-section of organizations to oppose a proposal now under consideration in the Congress that would require meat processors operating beyond one eight-hour shift to reimburse the government for the full cost of federal meat and poultry inspections. This proposal amounts to a yearly $104 million tax for a program that is already required by law and which confers no direct economic benefit on the meat industry. The imposition of inspection fees would be costly to plant operators and could cost thousands of Americans their jobs. This new food safety tax would inevitably impose additional pressures on the prices livestock producers receive, and the prices consumers pay, for these products. Additionally, having industry pay inspector salaries--even indirectly--could create misleading impressions about the integrity of the government inspection process. These potential problems far outweigh the revenue increase the fees would generate. Food safety is too important to be held hostage to the ever-changing politics of the federal budget. NPPC opposes the imposition of user fees on the meat packing industry that would cause our producers to bear the cost ensuring food safety.

FORUM FOR ANIMAL AGRICULTURE (FFAA)

NPPC is a member of the FFAA and a participant in the Food Animal Integrated Research for 1995 (FAIR '95) initiative. Testimony regarding the FAIR '95 initiative will be presented to this Committee by the Federation of American Societies of Food Animal Sciences These two organizations represent the livestock industry's effort to coordinate and integrate federal research affecting the animal industry. NPPC supports the research agenda developed by these groups and urges the Subcommittee's favorable consideration.

CONCLUSION

NPPC thanks the Committee for its support of the programs mentioned in this testimony. We look forward to working with the Committee as the FY 1994 Agriculture Appropriations Bill is drafted and finalized. With your continued support, America's pork producers can continue to work cooperatively with the federal government to improve our products and our industry's competitiveness in the international marketplace.

OKLAHOMA STATE AGRICULTURAL RESEARCH

WITNESS

CHARLES SCIFRES, ASSOCIATE DIRECTOR, DIVISION OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES, OKLAHOMA STATE UNIVERSITY

Mr. DURBIN. I am going to try to pronounce this. Dr. Charles Scifres, Oklahoma State?

Dr. SCIFRES. Exactly right.

Mr. DURBIN. Well, I was coached.

Mr. Skeen is going to handle this aspect of our hearing this afternoon. I thank him. I have to leave at this moment.

Mr. SKEEN. You are in good hands.

Dr. SCIFRES. Thank you.

Thank you, Mr. Chairman, Mr. Skeen, for this opportunity for me to appear before you representing Oklahoma State University.

Oklahoma State University would first like to state its strong support of the agricultural budget recommendations of the National Association of State Universities and Land-Grant Colleges and respectfully request that this committee support those recommended funding levels.

Oklahoma State University also seeks congressional support for fiscal 1994 of several initiatives of primary importance to the state of Oklahoma, the region and the nation.

O.S.U. seeks support in the amount of $600,000 for the Great Plains Policy Analysis Project which is a joint project with Kansas State University and involves the ten Great Plains states, is dedicated to identifying and measuring the impacts of federal agricultural and natural resource policy on Great Plains agricultural producers and industries.

Support is also sought in the amount of $400,000 to continue a project known as increasing the profitability of the Wheat/Stocker Cattle Enterprise, which is dedicated to the growth of the wheat grain stocker industries in the Great Plains through increasing profitability and decreasing risk and uncertainty for those producers. Preliminary results are already being applied by some producers and it is helping them to make more informed management decisions.

Support in the amount of $200,000 is requested for the project Integrated Production Practices for Horticultural Crops. This is an interdisciplinary research project that is dedicated to the development of production systems for vegetables and fruits, specifically targeting in the typical small grower, emphasizing ways that they might reduce risk and uncertainty and diversify their enterprises. Systems are being developed or have been developed for watermelons, cucumbers, cantaloupes, sweet corn, broccoli and other intensively managed crops.

O.S.U. also requests $750,000 from the USDA CSRS Building and Facilities Program as a one-to-one match with funds being raised by the Oklahoma Cattlemen to construct a beef cattle environmental stress facility. Current facilities which have been responsible for most of the shipping fever research are dilapidated, long distances from our campus and, as a result, our research in many of those areas has had to have been dropped.

U.S.D.A. CSRS has initiated a planning study for the facility. A site inspection has just been scheduled for early May. We anticipate a favorable study report by mid-1993 and the Oklahoma Cattlemen Association has its fund drive well under way.

O.S.U. requests $267,000 for support of preservation and processing research of selected fruits and vegetables, research that is dedicated to developing and refining and improving harvesting and handling procedures that will prolong the shelf life of fruits and vegetables. Some progress has been made in this area, particularly in the development of new instruments; an Oklahoma-based manufacturer has been identified for developing and merchandising those instruments, and improved storage conditions for watermelons, peaches, cantaloupes and other crops has been made.

Oklahoma loses an estimated 10 to 12 percent of its stored grain annually. The loss is valued at about 40 to 60 million dollars. Paradoxically, OSU is a national leader in stored grain research, management and education but does not have access to permanent facilities for conducting its research and education programs. OSU is therefore seeking $400,000 in support of its Grain and Stored Product Research, Teaching and Extension Center.

Support of these research and education projects will contribute to the development of technology and the dissemination and support of economic development of Oklahoma, the region and the nation. That support is respectfully requested.

Again, the opportunity to appear before you is greatly appreciated and I will be happy to entertain any questions you might have.

Mr. SKEEN. Thank you, Dr. Scifres. I just want to comment to you that we appreciate what the Land-Grant Colleges have done and particularly Oklahoma State University.

We have a vote going on here. Thank you for your testimony. We will take it under advisement and any way we can give you any help, we will surely try.

Dr. SCIFRES. Thank you, sir.

Mr. SKEEN. Thank you.

[The statement of Dr. Scifres follows:]

TESTIMONY
OF

DR. CHARLES SCIFRES

ASSOCIATE DIRECTOR,
DIVISION OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES

OKLAHOMA STATE UNIVERSITY

BEFORE THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

MARCH 31, 1993

Mr. Chairman and Members of the Subcommittee:

Thank you for providing the opportunity to appear before your committee today.

Oklahoma State University (OSU) first wishes to state its strong support of the agricultural budget recommendations of the National Association of State Universities and Land-Grant Colleges (NASULGC). Officials of OSU and other NASULGC institutions work closely with USDA in developing appropriation recommendations which are both reasonable and consistent with overall national program needs. We request the committee's support of these recommended funding levels for fiscal 1994.

Oklahoma State University seeks congressional support of funding for the following initiatives of primary importance to the State of Oklahoma:

- Great Plains Policy Analysis Project, KS and OK -- $600,000
- Increasing Profitability of the Wheat/Stocker Cattle Enterprise, OK -- $400,000
- Integrated Production Practices for Horticultural Crops, OK -- $200,000
- OSU Beef Cattle Environmental Stress Research Facility -- $750,000
- Preservation and Processing Research of Selected Fruits and Vegetables, OK -- $267,000
- OSU Grain and Stored Product Research/Teaching/Extension Center -- $400,000

Further information on each request follows.

GREAT PLAINS POLICY ANALYSIS PROJECT, KS AND OK
(Formerly known as "The Great Plains Agricultural Policy Center, KS and OK")

Oklahoma State University requests $600,000 for continuation of the Great Plains Policy Analysis Project, KS and OK, (GPPAP) in fiscal 1994. A combined effort of the ten Great Plains states, GPPAP is led by Oklahoma State University and Kansas State University. The research program is dedicated to research and technology transfer with active participation of scientists from the 10 Great Plains states and other states as appropriate.

The purpose of the project is to identify and measure the impacts of Federal agricultural and natural resource policies on the Great Plains region. Several key issues with important implications to the Great Plains will be the focus of project efforts. Such issues include: 1) The impact on agricultural firms, industries and sectors of the Great Plains as a result of a North American Free Trade Agreement; 2) The implications for the Great Plains region of post-Conservation Reserve Land-use policies; and 3) The implications for Great Plains agricultural producers of environmental policies including planting flexibility, conservation compliance, wetlands and water quality legislation.

INCREASING PROFITABILITY OF THE WHEAT/STOCKER CATTLE ENTERPRISE, OK
(Formerly known as "Expanded Wheat Pasture, OK")

OSU requests $400,000 for the continuation of this research project in fiscal 1994. Project objectives are: 1) increase profitability of the wheat grain/stocker-feeder cattle enterprise; 2) decrease production risks and income variability from the enterprise and thereby increase growth of the industry in the southern Great Plains; and 3) improve the economies of many rural communities in Oklahoma and the southern Great Plains. The objectives of this project are being accomplished by improving agronomic practices for growing more wheat forage, developing strategic supplementation strategies for wheat pasture stocker cattle, and developing decision-support microcomputer models. Preliminary information is already being adopted by growers, with positive results.

INTEGRATED PRODUCTION PRACTICES FOR HORTICULTURAL CROPS, OK
(Formerly known as "Integrated Production Systems, OK")

OSU requests $200,000 for continuation of this research project in fiscal 1994. The project is designed to develop production systems for horticultural crops by incorporating information obtained through the joint research efforts of soil scientists, horticulturists, entomologists, plant pathologists, and agricultural economists into integrated crop management systems for growers. The production systems are being designed for small or large, independent or contract, growers, and are beginning to stimulate great interest in the region by processors. Systems are being developed for watermelons, cucumbers, sweet corn and blackberries.

OSU BEEF CATTLE ENVIRONMENTAL STRESS RESEARCH FACILITY

Oklahoma State University requests $750,000 through the USDA/CSRS Buildings and Facilities program for construction of the Beef Cattle Environmental Stress Research Facility at OSU. The beef cattle industry of the state and its allied industries are committed to providing matching funds to allow the construction of the proposed $1,500,000 facility. The project has been endorsed by the Oklahoma Cattlemen's Association.

USDA/CSRS has initiated a planning study for the facility, a site inspection is scheduled for early May, and a favorable study report is expected to be completed by mid-1993. Designs for the facility are partially completed.

Present facilities badly need renovation and are located great distances from OSU, making daily observation and measurements impossible. Furthermore, available facilities do not meet the design and equipment standards now demanded for research results to be acceptable to FDA and other federal agencies. Many studies on treatments for stress abatement and management have had to be curtailed because of these deficiencies.

The proposed facility will allow state-of-the-art research on the management of environmental and nutritional stress. Because much of the stress is the result of transporting animals for long distances in inclement weather (e.g., "shipping fever"), the planned facility allows for use of six truckloads at a time with a truckload being the experimental unit.

PRESERVATION AND PROCESSING RESEARCH OF SELECTED FRUITS AND VEGETABLES, OK

The continuation of funding for preservation and processing research at OSU is requested at a level of $267,000 in fiscal 1994. Preservation of quality after harvest is of critical importance for fresh fruits and vegetables. The overall objective of the research is to define the major limitations for maintaining quality of harvested fruits and vegetables, especially for Oklahoma-grown produce, and then prescribe appropriate harvesting and handling protocols (or refinement in handling) to extend shelf life.

Projects to establish proper variety selection for improved harvest and post-harvest handling characteristics, to devise new instruments and procedures for assessing and maintaining post-harvest quality, and to evaluate processing potential for fruits and vegetables are underway. Electronics development for a new instrument for assessing fresh market quality of produce has been completed, and a prototype device has been tested for nondestructive assignment of optimum harvest maturity for watermelons, and for detecting edible quality/storage potential for peaches. Refinements in instrument design for detecting market quality/potential for various fruits and vegetables are being tested for potential commercial adaptation and utilization. An Oklahoma-based manufacturer for this product has been identified, and matching funding to accommodate technology transfer have been received from a state agency. Potential commercial products may be available as early as 1995 or 1996.

Variety recommendations for improved post-harvest handling characteristics, suggestions for improved fruit and vegetable handling and storage, and evaluation of new instrumentation for on-line nondestructive assignment of quality for harvested products can be completed as early as fiscal year 1998. Harvest quality evaluations for small fruit varieties were completed during the 1992 growing season, with recommendations to be made in 1993. Watermelon and cantaloupe harvest quality evaluations were initiated in 1992 to expand integrated production efforts, and will be continued through the 1994 growing season.

OSU GRAIN AND STORED PRODUCT RESEARCH/TEACHING/EXTENSION CENTER

An appropriation of $400,000 through the CSRS Buildings and Facilities program is requested for the OSU Grain Storage Research/Teaching/Extension Center. Oklahoma State University has emerged as a national leader in stored grain management during the past 10 years through the work of a critical mass of researchers and specialists. The proposed facility will include field scale and laboratory grain storage bins for research and education on high risk grain storage problems, grain and bulk product processing and value added opportunities in Oklahoma and the region. Technologies designed to minimize pesticide use, develop processing techniques for livestock feed and human food products, and to provide assistance to grain export marketing efforts will be developed.

Oklahoma loses an estimated 10-12% ($40-60 million) of stored grain annually. Strong support for a stored grain research center is documented by the Oklahoma commercial wheat industry's commissions and associations. Support is needed to assist the commercial grain industry, value-added grain products manufacturers, and livestock industry production efficiency and profitability. Storage and processing technology has lagged behind field production technologies for decades. Development of the proposed grain storage and processing center will exhibit strong support for this vital part of Oklahoma's economy by facilitating improved quality and reducing costs, improving Oklahoma's competitiveness in domestic and world markets.

CLOSING

Support of these projects, both new and ongoing, will help ensure the availability of state-of-the-art agricultural research, information and education programs for the continued economic development of Oklahoma, the region and the nation. Your support of these programs is respectfully requested, and the opportunity to appear before you is greatly appreciated.

g:agtest94

DISTANCE LEARNING AND INFORMATION TECHNOLOGY CENTER

WITNESSES

HON. FRED GRANDY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IOWA

JAMES P. DANIEL, MEMBER BOARD OF TRUSTEES, BUENA VISTA COLLEGE, REPRESENTING KENNETH KAPLAN, PRESIDENT, MICROWARE SYSTEMS CORPORATION AND MEMBER, BOARD OF TRUSTEES, BUENA VISTA COLLEGE

Mr. SKEEN. Fred, do you want to testify now?

Mr. GRANDY. Well, Mr.—Mr. Chairman?

Mr. SKEEN. Yes, sir. That is all right. It is hard on your tongue, I know that. [Laughter.] This is a very——

Mr. GRANDY. Really more bipartisanship than I can see. Mr. Skeen. Yes, but this is a very democratic committee.

Well, if I could at least introduce my colleague and constituent——

Mr. SKEEN. And even a Republican can be democratic once in a while.

Mr. GRANDY. Let us quit while we are ahead, Mr. Chairman.

Mr. SKEEN. All right. [Laughter.]

Well, I was trying to give you a chance to sit down and warm up.

Mr. GRANDY. All right. Well, I am ready to go.

Mr. SKEEN. We have before us the Honorable Fred Grandy from the State of Iowa and we are glad to have you here, Fred. Go ahead.

Mr. GRANDY. Thank you, Mr. Chairman, and the distinguished ranking chair. I want today to introduce to you Dr. James P. Daniel, who is Vice President of Institutional Advancement at Buena Vista College. Dr. Daniel is representing Kenneth Kaplan, who is a member of the board of trustees of Buena Vista College and the president of Microware Systems Corporation in Des Moines. Mr. Kaplan testified last year before the committee but was not able to make it today.

But I am here because Dr. Daniel is going to brief you on the progress of Buena Vista College's proposal to establish a model regional Distance Learning and Information Technology Center geared to redirection and worker retraining in rural areas.

And, Mr. Skeen, as you know, because you represent a rural area, one of the problems that we see in farm country is decline of family farms, loss of jobs, out-migration of workers.

Buena Vista College, I think, has hit on an opportunity to perhaps reintegrate rural workers back into the rural communities through exploring other industries and job options.

Many lack the necessary skills to reenter the workforce and the economic repercussions of this are staggering. But there are alternatives and there are solutions. The explosion of information technologies and the phenomenon of distance learning education can be the key to the future for rural Americans who must complete their education or upgrade their job skills for a changing marketplace.

With this in mind, I hope you will give very strong consideration to Buena Vista College's request for a federal partnership for this innovative proposal.

Through the establishment of satellite campuses across Iowa, Buena Vista College has created one of the most innovative educational systems in the country. In 1985, B.V. College became the nation's first intelligent campus through a comprehensive, broadband communications system. Their Distance Learning Center will build on this solid foundation, play a major part in revitalizing our rural areas and the center will provide a model for replication throughout rural America and assist in meeting the nation's educational and rural development goals in a cost effective and efficient manner.

I might also say, Mr. Chairman, just in closing, Iowa is one of the few states to have already begun the work on a broad based fiber optic network of which B.V. is very much a part, so I am hopeful that this project will find favor with the committee because obviously it is in my district, obviously I support it for a variety of parochial reasons, but it is a real model that I think in the light of this administration's new concern and commitment to new technologies will pave the way exactly to those technologies.

So I will take the rest of my time and give it to Dr. Daniel, who I am sure will do this district proud.

Mr. SKEEN. Thank you very much.

Mr. GRANDY. Thank you.

Mr. DANIEL. Thank you, Congressman Grandy.

Mr. SKEEN. If you do not mind holding it, we will go do our voting and come right back.

Mr. DANIEL. All right.

[Recess.]

Mr. SKEEN. Dr. Daniel, thank you for your patience.

Mr. DANIEL. Thank you, sir. It is a privilege to be here. I am pleased to have the opportunity to appear before the subcommittee on behalf of Buena Vista College. I know that your time constraints are tight and under the circumstances, I would like to request that the full text of my comments be inserted in the hearing record.

Mr. SKEEN. That will be done, Doctor.

Mr. DANIEL. And I would like to take this time to highlight the critical need for federal investment in improving the communications and information infrastructure in rural American and to just briefly describe the creative proposal which Buena Vista College has formulated for a model demonstration Distance Learning and Technology Center.

Breathing life back into rural America is a primary challenge in the 1990s. Our first national priority must be in helping U.S. workers adjust to the ever changing requirements of the workplace. It has been increasingly clear to policy experts that a serious gap is widening between the relatively low education and skills of new workers and the advancing skill requirements of the new economy. Our competitive edge in what is now a global marketplace will be based on our ability to teach our workers not just to be technically proficient but to think, to evaluate, to adapt, to use information resources and to become life-long learners.

Today, the value of products and services that we exchange is increasingly a function of their information content and the knowledge used to create them, rather than the raw materials used to produce them. Because of this shift, the ability to easily access and share information and to stimulate the creation of new ideas is essential to maintaining a strong economy.

Nowhere is the need greater for new information technology resources and job redirection than in Rural America. Recently published statistics for the state of Iowa document comprehensive demographic, social and economic changes that have occurred there in the last three decades.

In 1954, for example, we had 200,000 farms in Iowa. In 1987, that number had decreased to slightly over 100,000. Ninety percent of us produced 100 percent of the food in 1954 and now 3 percent of us produce 120 percent of the food that is needed.

That simply means that many agricultural workers and workers in ag related support industries have been and are being displaced.

According to a December 1992 report of the Iowa Utilities Board and the Department of Economic Development, significant questions have arisen regarding whether the state of Iowa can maintain its traditionally strong educational standards given the increased rate of the out-migration of higher education graduates due to job shortage. Also the report rang the warning bell for rural schools, citing the lack of educational resources, technology and telecommunications deployment which rural schools confront in comparison to urban schools.

A full description of the proposed Distance Learning and Information Technology Center which we propose is contained in my written testimony, Mr. Chairman. Let me say that the center will go a long way to assist rural Iowans in adjusting to the new demands of changing agricultural economy through education and access. The center will direct its resources towards educating students at the college's nine branch campuses and giving regional businesses access to a wealth of information and resources.

Buena Vista is eminently qualified to assume a national and regional leadership position in its development of this demonstration center. Over the past 18 years, we have developed a model program to enable individuals to receive the education and training necessary to adjust to such a rural evolution.

In 1985, the college became the nation's first intelligent campus. That is, it was the first campus in the country to have a comprehensive broadband communications system installed. And, as Congressman Grandy mentioned, Buena Vista has established nine satellite campuses across Iowa over the past 18 years. The educational programs have been designed to specifically meet the needs of nontraditional students.

In recent years, however, the college has encountered problems delivering educational resource materials to these students who are removed from the main campus. The construction and furnishing of individual branch libraries in nine remote locations is not economically feasible, while delivery of materials by truck is not completed in a timely manner. The advanced technology will enable students at the branch campuses to access these materials immediately.

Mr. Chairman, President Clinton has stated in his economic plan that:

> The only way America can compete and win in the 21st century is to have the best educated, best trained workforce in the world linked together by a transportation and communication network second to none.

Just as America invested in its infrastructure in the 1950s by building interstate highways, the time is here to begin laying a foundation for an extraordinarily competitive 21st century. The Distance Learning Center will be a critical component of the information superhighway that will educate and retrain the workforce and lead the country to economic growth.

Mr. Chairman, I ask your serious consideration in support of this initiative within the fiscal 1994 Agricultural Rural Development, FDA and Related Agencies Subcommittee Appropriations Act. Buena Vista is fully committed to matching every federal dollar allocated and has in fact already raised a total of $7 million from private sources for this purpose.

The college has performed the necessary architectural and engineering work and is ready to move forward immediately with its construction plans once federal support is forthcoming. To that end, I am requesting a federal partnership in a total amount of $8.5 million to complete this initiative.

Thank you, Mr. Chairman. I would be glad to answer any questions.

Mr. SKEEN. Doctor, I do not have any questions but I think that your testimony is exemplary of the fact that you understand the technology and the importance of communications and the future of this country and we appreciate that very much.

I assure you that this committee certainly is dedicated to trying to get the funding necessary to the institutions that are interested in this new technology and helping the rural communities do the job that they have been doing so well.

We thank you for your testimony.

Mr. DANIEL. Thank you, Congressman.

[The information follows:]

TESTIMONY OF
MR. KENNETH B. KAPLAN,
PRESIDENT OF MICROWARE SYSTEMS CORPORATION
AND MEMBER OF THE BOARD OF TRUSTEES
BUENA VISTA COLLEGE
STORM LAKE, IOWA

Presented to the
Agriculture, Rural Development, Food and Drug Administration
and Related Agencies Appropriations Subcommittee
Committee on Appropriations
U.S. House of Representatives

March 31, 1993

Mr. Chairman and distinguished members of the Subcommittee, I thank you for the opportunity to appear before you today on behalf of Buena Vista College in Storm Lake, Iowa. I am accompanied by Dr. James P. Daniel, Vice President of the College.

I am very pleased to return to this Subcommittee this afternoon to give you a status report on the progress which Buena Vista College has made in its plans to establish a model Distance Learning and Information Technology Center in Iowa. During my testimony, I will review the major strides which we have made in attracting private support for the Center, and ask the Subcommittee's serious consideration and support for a federal partnership for this critical initiative.

Given this Subcommittee's interest in rural development, I would like to focus my testimony on the importance of education and an adequate information infrastructure to rural revitalization and economic development. A report recently issued by the United States General Accounting Office (GAO) highlighted the fact that certain rural characteristics make development difficult. First, many rural areas are far from major population centers. Remote rural areas generally cannot provide the opportunities for face-to-face communication that are important to business development and are commonplace in more densely populated areas. Rural residents tend to be less informed than residents of metropolitan areas about changes in the national and global economy that will affect their economic future. Further, rural people lack the access to expertise and specialized knowledge that is widely available in metropolitan areas.

As you well know, and as the GAO Report on Rural Development summarizes, the economies in rural areas have tended to be based on a single industry. When that industry is hurt by economic change, the whole region tends to decline. In today's economy, traditional

rural specialties -- such as agriculture -- have become less important as a source of new employment and economic growth and are being lost to overseas competitors.

At the same time, a serious gap is emerging between the relatively low education and skills of new workers -- many of whom are disadvantaged -- and the advancing skill requirements of the new economy. Simultaneously, the knowledge economy continues to grow. Today, nearly fifty percent of American workers are employed in some aspect of the "knowledge" or "information" economy. Consequently, our competitive edge in what is now a global marketplace will be based on our ability to teach our workers not just to be technically proficient, but to think, to evaluate, to adapt, to use information resources and to become lifelong learners.

In the future, the United States' primary resource for generating economic prosperity, improved quality of life, and global competitiveness will be our ability to quickly and efficiently generate and exchange information, technology and ideas. John Sculley, Chairman of Apple Computer, and Chairman, Computer Systems Policy Project, has effectively summarized the challenge before us: "Throughout its history, the United States has followed a tradition of creating underlying national foundations -- infrastructures -- that have fostered a quality of life in America unmatched by any nation. Our transportation, electric power, and water systems are all solid examples of this tradition. To remain an economic power in the 21st century, the United States must have in place an infrastructure that allows us to compete in the Information Age by providing a tool to be continually more productive and innovative."

A new set of economic ground rules has been created born of the advent of the information age. Today, the value of the products and services we exchange is increasingly a function of their information content and the knowledge used to create them rather than the raw materials used to produce them. Because of this shift, the ability to easily access and share information and stimulate the creation of new ideas is essential to maintaining a strong economy, developing world class industries and enhancing the quality of life for every citizen.

The information infrastructure, used in conjunction with a collection of "information appliances" -- tools that will combine computing, communications, and video technologies -- will give individuals in rural areas, in particular, ready access to libraries, job information and cultural activities now only available to those who live near those resources. By making information resources readily available and easy to use, the information infrastructure of the future will revolutionize our ability to access the information we need and our ability to collaborate and cooperate with others.

Nowhere is the need greater for new information technology resources and job re-direction than in rural America. The demographic, social and economic changes that have been developing in this nation over the past several decades have changed the face of rural communities. Recently-published statistics for the State of Iowa document the comprehensive

changes that have occurred in the last three decades. In 1954, there were 192,933 farms in Iowa. In 1987, that number decreased to 105,180 farms. At the same time, the average size of a farm in 1954 was 177 acres as opposed to 301 acres in 1987. In 1954, there were only 271 farms that were larger than 1,000 acres. In 1987, there were 3,700 farms larger than 1,000 acres. In sum, ninety percent of us produced one-hundred percent of the food in the agricultural era; now three percent of us produce one-hundred and twenty percent.

As the number of family farms continues to decrease, more and more rural workers need to explore other industries and job options. These workers are recognized as some of the most disciplined, hardworking and productive people in America. Many lack the necessary skills to re-enter the workforce and the economic repercussions of this are staggering. But there are alternatives. There are solutions. The explosion of information technologies and the phenomenon of distance learning education can be the key to the future for rural Americans who must complete their education or upgrade their job skills for a changing marketplace.

The people of Iowa and middle America have traditionally prized education. They continue to look to their educational systems for solutions to problems. They look to their schools to deal with the displacements that are the by-products of progress in the current agricultural economy.

According to a December, 1992 report to the Iowa Utilities Board and Department of Economic Development recently released by Arthur D. Little, Inc., significant questions have arisen regarding whether the State of Iowa can maintain its strong educational standards given the increased rate of out-migration of higher education graduates due to job shortage. Also, the report rang the warning bell for rural schools citing the lack of educational resources, technology and telecommunications deployment which rural schools confront in comparison to urban schools.

All of these difficulties have been further exacerbated by the continuing "brain drain" from Iowa -- the exodus of college graduates from Iowa in search of jobs in urban areas. According to a 1991 Census Bureau report, Iowa ranks ninth nationally in percentage of persons 25 and older who have completed high school. However, Iowa is tied for 40th in terms of percentage of persons 25 and older who have completed four years of college. This gap has grown noticeably over the past two decades.

In the past 18 years, Buena Vista College has been in the forefront in responding to the unique and multi-faceted needs of rural non-traditional students and their imperiled communities. Recognizing the value of further education to rural workers, Buena Vista developed a model program to enable individuals to receive the education and training necessary to adjust to this rural evolution. Through the establishment of satellite campuses across Iowa, Buena Vista has created one of the most innovative educational systems in the country.

across Iowa, Buena Vista has created one of the most innovative educational systems in the country.

As the College prepares to extend its outreach, it will build upon a solid foundation and strong track record in continuing education and be a major resource for the State of Iowa. Specifically, Buena Vista College is planning to establish the "Distance Learning and Information Technology Center" to assist rural Iowans in adjusting to the new demands of the changing agricultural economy through education and access. The Center, to be located in Storm Lake, will direct its resources towards educating students at the College's nine branch campuses and giving businesses access to a wealth of information and resources.

The proposed Distance Learning and Information Technology Center consists of four primary elements integrated to create a multimedia educational resource available throughout Iowa. The components of the Center include:

1) A highly complex, encyclopedic base of information, statistics, consulting, and other data organized for quick retrieval, combination and comparison.

2) A vast, sophisticated system of video/audio/digital signal communications technology that can only be found within the context of a major research computer center, coupled with a full service television production studio and radio station that are geared to and used extensively for higher education. A state-wide fiber optic cable system will reach terminals within every county in the state.

3) A distinguished teaching and consulting faculty that has experience in the creation of new knowledge, the storage and retrieval of existing information and the expertise to transfer that information to a diverse population.

4) An extensive network of cooperative arrangements between seven different community colleges and Buena Vista College enabling students in isolated areas to obtain upper level baccalaureate degrees.

These basic elements, carefully integrated and networked, will produce one of the most powerful educational and economic development tools available for rural America. The model established in Iowa will serve to demonstrate the educational potential of utilizing fiber optics in distance education.

The proposed Distance Learning Center is literally a university without walls. Through the auspices of the new Center, Buena Vista will become an institution that is no longer bound to its physical campus. The Center will take the total learning potential of a sophisticated higher education institution and make that full power available to anyone, anywhere, anytime, without regard to their geographical location.

I strongly believe that the Distance Learning and Information Technology Center proposed by Buena Vista College will be an integral component in the revitalization of rural Iowa and will provide a model for replication throughout rural America. The Center will address the importance of improving our nation's technology base and educational resources as demonstrated by the Congress in establishing the National Research and Educational Network (NREN) in the High Performance Computing Act of 1992 (Public Law 102-194).

This noteworthy distance learning initiative will require construction on the Storm Lake campus of a new 50,000 square foot building that will constitute the head-end technology and resource base for the Center. This facility will house the equipment necessary to network the branch campuses, at least one electronic classroom, and space for additional resource materials. In addition, the Center will require the dedication of space at each of the nine branch campuses to house the terminal communications equipment and scholar kiosks. Buena Vista will also need to acquire the proper electronic technology that will allow it to bundle its other electronic and information resources and to send and signal over the State's new fiber optic network.

Mr. Chairman, I ask for your serious consideration and support of this initiative within the FY 1994 Agriculture, Rural Development, FDA, and Related Agencies Subcommittee Appropriations Act. Buena Vista College is committed to matching every federal dollar allocated, and has, in fact, already raised a total of $7,000,000 from private sources. The College has performed the necessary architecture and engineering work and is ready to move forward immediately with its construction plans once federal support is received. To that end, I am requesting a federal partnership in the total amount of $8.5 million to complete this initiative.

The Distance Learning and Information Technology Center will apply the latest developments in communications to meet national priorities established by Congress and the Administration. In providing the residents of Iowa with greater educational opportunities, the Center will be a crucial asset in building and diversifying the state's agriculturally-based economy.

The impact of this innovative Center will be felt on a national and regional level as business observes the power of higher education in improving workers' skills. The successful application of distance learning will also serve as a model for other regions and for other industries.

Thank you, Mr. Chairman, for your time and consideration.

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EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH

WITNESS

G. WILLIAM CROKER, JR., DIRECTOR OF GOVERNMENT RELATIONS, UNIVERSITY OF ALABAMA IN BIRMINGHAM, REPRESENTING THE COALITION OF EPSCOR STATES

Mr. SKEEN. Dr. Croker? Did I make you a doctor?

Mr. CROKER. You have promoted me.

Mr. SKEEN. I might have demoted you.

Mr. CROKER. That is true. Thank you.

Mr. SKEEN. Mr. Croker, with all of the distinguished doctors we have here, you might just as well be a doctor.

Mr. CROKER. I understand.

My name is Bill Croker and I am Assistant to the President at the University of Alabama at Birmingham, which has a lot of doctors in it. [Laughter.]

I am here this afternoon on behalf of the Coalition of EPSCOR States to speak in support of the Experimental Program to Stimulate Competitive Research.

The EPSCOR program is intended to broaden the participation of institutions in designated states in the merit-reviewed federal research initiatives that ensure this country's technological and scientific leadership. It does so by fostering systematic and sustainable improvement in the research capacities of institutions in eligible states.

By supporting cooperative efforts among these universities which are located in states with limited resources, EPSCOR provides the critical mass around which scientific excellence can develop in states like Alabama, Arkansas, Mississippi and Nevada.

The National Science Foundation established the EPSCOR program in 1979 in response to congressional concerns raised by your colleague Ray Thornton and others about the concentration of federal support for university research at a relatively small number of institutions that are located in just a handful of states. Congress has gone on to expand EPSCOR beyond the National Science Foundation to include agencies such as the Agriculture Department.

We urge the subcommittee to assure that EPSCOR states are included as part of the National Research Initiative Competitive Grants Program.

We suggest that the Appropriations Committee act to ensure that reasonable geographic distribution in the awarding of initiative grants by directing the Agriculture Department to set aside a minimum of 10 percent of the funds in fiscal year 1994 for this EPSCOR initiative. These awards should be coordinated through the individual state EPSCOR committees to assure support for the state's overall effort to improve its infrastructure and to enhance its ability to compete successfully in high tech scientific fields.

Arkansas happens to be an EPSCOR state, thanks to Congressman Thornton. And as President Clinton stated during the campaign.

Federal programs like EPSCOR can help assure that top-flight university researchers receive the research funding they deserve no matter where they work. In addition, they help provide the breadth needed for a healthy U.S. technology base.

In closing, Mr. Chairman and members of the subcommittee, we thank you for listening to our presentation on EPSCOR. We urge fiscal year 1994 support for this program at the Agriculture Department.

In Alabama we believe that it has already proven to be an exciting program which has produced significant benefits for our state and I know in others. It is a program that we believe will continue to produce solid results in education and scientific research for the nation as a whole.

We hope that you will continue your support of the EPSCOR program.

Thank you very much. I will certainly answer any questions.

Mr. SKEEN. Thank you, Mr. Croker. We are going to recommend you for a doctorate.

Mr. CROKER. Thank you very much. [Laughter.]

Mr. SKEEN. We appreciate your testimony and we certainly do want to give every bit of support we can to EPSCOR and other programs and we appreciate you folks in the institutions of learning that come up here and give this kind of testimony. We appreciate it.

Mr. CROKER. Thank you very much, Mr. Chairman.

Mr. SKEEN. Thank you, sir.

[The statement of Mr. Croker follows:]

TESTIMONY OF G. WILLIAM CROKER, JR.
UNIVERSITY OF ALABAMA IN BIRMINGHAM
SUBCOMMITTEE ON AGRICULTURE, COMMITTEE ON APPROPRIATIONS
WEDNESDAY, MARCH 31, 1993

Mr. Chairman:

My name is Bill Croker. I am Director of Government Relations for the University of Alabama in Birmingham and the former Executive Director of the Coalition of EPSCoR States. It is a pleasure to have this opportunity to appear before the Subcommittee in support of the Experimental Program to Stimulate Competitive Research (EPSCoR). This morning I am testifying on behalf of the Coalition of EPSCoR States and the nineteen states[1] that participate in EPSCoR.

The primary mission of EPSCoR is to foster systemic and sustainable change in the capacities of universities in eligible states to support nationally competitive academic research. Its secondary objectives are to assure a broad geographic distribution of merit-reviewed research awards and access to quality education in science and engineering. In practice, EPSCoR also fosters enhanced interaction and cooperation in research and technology development among universities, state government, and industry in participating EPSCoR states.

The National Science Foundation established the EPSCoR program in 1979 in response to Congressional concerns about the concentration of federal support for university research at a relatively small number of institutions, located in a handful of states. Congress has expanded EPSCoR beyond NSF; and EPSCoR programs are now underway — or in the process of being established in — the Departments of Agriculture, Energy, and Defense; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Institutes of Health.

The EPSCoR program is intended to broaden participation in the Federally funded research initiatives that ensure this country's technological and scientific leadership. The future ability of the United States to meet the economic and health challenges of the next century depends, in large part, on building a truly national scientific and technical research infrastructure.

Characteristics of the EPSCoR States:

Presently, Federal research funding is concentrated in relatively few states and regions of the nation. The 18 EPSCoR

[1] Alabama, Arkansas, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, North Dakota, Oklahoma, South Carolina, South Dakota, Vermont, West Virginia, Wyoming, and the Commonwealth of Puerto Rico.

states and Puerto Rico, while containing 15 percent of the United States population, receive only 6.6 percent of Federal research and development dollars. In contrast, the top five research states, with 27.9 percent of the population, receive 44.5 percent of Federal research and development dollars.

The EPSCoR Process:

I should explain, by way of background, that the EPSCoR approach involves the establishment of a statewide coordinating mechanism to

-- identify state and institutional barriers to competitive research;

-- develop a comprehensive improvement plan supported by state and institutional resources;

-- undertake a merit review of all EPSCoR programs and;

-- implement the improvement plan focusing on infrastructure improvement, research enhancements, and human-resource development.

The result has been a significant improvement in state support for research and development in the EPSCoR states. Federal support as a percentage of total spending for research and development at our research universities continues to lag significantly behind both the national average for Federal support and the percentage of support provided to the top five states. On the other hand, state support in the EPSCoR states is twice the national average and over seven times as great on a percentage basis as it is in the state that receives the greatest amount of Federal support.

The National Research Initiative Competitive Grants Program:

As part of its fiscal year 1994 budget request of this Subcommittee, the Department of Agriculture is expected to request funding for the National Research Initiative Competitive Grants Program. It is our purpose before this Subcommittee to urge your support for efforts to assure that EPSCoR states are not left out of this Initiative as it moves forward. Absent a specific program to assure improvement in our ability to compete, history would indicate that the majority of funds will once again find their way into a small number of states with established, largely Federally funded, scientific infrastructures.

We are pleased that the Department of Agriculture has set aside 10 percent of the funds in this program for "research strengthening grants." We are concerned, however, that this amount is not sufficient. Additionally, we are concerned that the program for achieving the largest possible improvement in competitiveness

from these grants needs to be more fully defined.

Therefore, we would suggest the following guidelines for a program to assure reasonable geographic distribution in the awarding of Initiative grants:

1) We ask that, as they did last year, the Appropriations Committees set aside 10 percent of the funds in fiscal year 1994 for the EPSCoR initiative. These awards should be coordinated through the individual state EPSCoR committees to assure support for the state's overall effort to improve its infrastructure; to increase the number and quality of grant applications submitted by its researchers; and, ultimately, to enhance its ability to compete successfully in the high-tech economy.

2) A goal should be established to have 20 percent of the actual research grant awards made to EPSCoR states. If the number of high quality research proposals submitted from EPSCoR states is not sufficient to reach this goal, the Department of Agriculture could report this determination annually to the Congress, together with their suggestions for additional infrastructure improvements to allow the goal to be reached.

Conclusion:

The state-based nature of EPSCoR is directly responsive to concerns about the concentration of research in a small number of institutions in a way that institutional programs intended to foster research are not. Other advantages include encouraging cooperative efforts among universities in states with limited resources, developing a broad base of research scientists with expertise related to an agency's mission, and providing a critical mass around which a state's scientific enterprise can develop. In addition to fostering competition and geographical equity in the distribution of Federal research funds, participating states find real value in the EPSCoR program in an international economy driven by technology.

As President Clinton stated during last fall's campaign: "Federal programs like the Experimental Program to Stimulate Competitive Research have helped researchers in smaller universities to more effectively compete for federal research dollars. Such programs can help ensure that top-flight university researchers receive the research funding they deserve, no matter where they work. In addition they help provide the breadth needed for a healthy U.S. technology base."

In closing, Mr. Chairman and Members of the Subcommittee, we thank you for listening to our presentation on the Experimental Program to Stimulate Competitive Research. We urge fiscal year

1994 support for EPSCoR at the Agriculture Department. We believe it is an exciting program with great potential benefit for states such as Alabama, Arkansas, Mississippi, and Nevada. It is a program that we believe will produce solid results in education and scientific research for the participating states and the Nation as a whole. We hope you will join us in supporting EPSCoR.

PUBLIC EDUCATION RESEARCH AND EXTENSION

WITNESSES

RAYMOND J. MILLER, PRESIDENT, INSTITUTE FOR AGRICULTURE AND NATURAL RESOURCES, UNIVERSITY OF MARYLAND SYSTEM, REPRESENTING NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

GIL THOMPKINS, NASULGC 1890 EXTENSION PROGRAMS, AND JOHN WHITE, NASULGC ACADEMIC COMMITTEE ON POLICY

Mr. SKEEN. Dr. Miller, welcome to the committee.

Mr. MILLER. Thank you.

Mr. SKEEN. We will take your testimony in abbreviated or elongated form, whichever, it will all be in the record.

Mr. MILLER. Well, I will give you the abbreviated form.

Mr. SKEEN. Thank you.

Mr. MILLER. I am Ray Miller, President of the Maryland Institute for Agriculture and Natural Resources, University of Maryland System, and I am presently serving as the chair of the Fiscal Year 1994 Budget Committee of the Board of Agriculture of the National Association of State Universities and Land-Grant Colleges.

The opportunity to include the full statement in the hearing record is very much appreciated.

We have a rather detailed and comprehensive process for developing the budget and we have a budget committee we work with, a number of whom are going to testify later. But two of those members who are here who will not be testifying I would like to recognize. One is Gil Thompkins, representing the 1890 Extension Programs, and the other is John White, representing the Academic Committee on Policy.

Mr. SKEEN. We are delighted to have them here.

Dr. MILLER. I think one of the things that has allowed the success of American agriculture is the investment that this country has made in public education research and extension.

For example, agricultural output has doubled since 1950 while conventional inputs have declined. This translates into a saving in 1990 of approximately $196 billion for the consumer. This is compared to what we would have had to pay if we were still using 1950 technology.

Similarly, to produce the same amount of food today with 1950 technology would require 393 million additional acres.

In addition to those kinds of changes, these programs have brought about a number of social changes that have really helped America as well. For example, the Cooperative Extension Nutrition Education Program has assisted thousands of low income families to improve their diet and their nutrition. And the 4-H program, which is the largest non-formal education program for youth in this country serves about five and a half million young people each year.

But the important point that has to be made is that if we fail to maintain our current pace of producing new technology, erosion, urbanization and the continued decrease of our urban well being will be very, very hard to prevent.

So although agriculture productivity continues to grow, it is growing at a much slower rate and, as a matter of fact, it is growing at a slower rate than demand is increasing.

It is estimated that approximately 20 significant technological developments would need to be developed and adopted in the 1990s just to stay even with 1990 technology or production abilities with 1990 technology. We must continue our support for private and public research extension and education.

Our 1994 budget priorities:

We have identified two overarching needs for fiscal year 1994. One is to maintain our base, to strengthen base programs for research, extension and higher education. These funds provide for the essential continuing support of the infrastructure within which long and short-term projects and programs can be conducted. These base funds assure a stable resource base of personnel and facilities in each state and territory. They provide flexibility. They provide the initial capacity to take on contemporary issues. They undergird our continuing education system. And they allow us to leverage funds from state, county and the private sectors.

Our second priority is that of special initiatives in support of the food agriculture and environmental system and these include such things as the National Research Initiative, programs on water quality, youth at risk, food safety and sustainable agriculture. Base funding sustains the infrastructure from which these new initiatives can emanate.

We have had a large number of citizens from around this country representing all phases of the land-grant system help us put this budget together and we feel that it is reasonable yet effective. This budget addresses critical national priorities and provides solutions to important problems in agriculture, environmental, natural resources and rural and economic welfare.

We appreciate this opportunity and I would like to request that you accept two additional items for the record. One is a statement by the president of the Land-Grant Association, Peter Magraph, concerning agricultural research facilities. I have a copy of this with me. And second is our science and education budget recommendations for fiscal year 1994 once we have received the president's budget next week.

Mr. SKEEN. We will have those statements included in the record.

Dr. MILLER. Thank you, sir.

Mr. SKEEN. Thank you very much for your testimony.

[The statement of Dr. Miller and NASULGC board members follows:]



NASULGC National Association of State Universities and Land-Grant Colleges

April 19, 1993

The Honorable Richard J. Durbin
Chairman
Subcommittee on Agriculture, Rural Development, Food and
Drug Administration, and Related Agencies
Committee on Appropriations
2362 Rayburn House Office Building
U. S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Dr. Raymond J. Miller, Chairman of NASULGC's Board on Agriculture's 1994 Budget Committee, testified before your Subcommittee on March 31, 1993 in relation to the Fiscal Year 1994 budget for the U. S. Department of Agriculture -- focusing on the areas of science and education with particular attention on agricultural research, extension, and academic programs.

During the course of our testimony, Dr. Miller requested and received permission to have the budget tables indicating the priorities of NASULGC for USDA inserted into the hearing record at the end of his statement. A copy of the NASULGC FY 1994 budget recommendations for USDA have been enclosed for inclusion in the hearing record.

Your interest in and support of the nation's land-grant system is greatly appreciated.

Please do not hesitate to contact me at (202) 778-0828 whenever NASULGC can be of any assistance.

Sincerely,

Eddie G. Gouge
Assistant Director
Federal Relations -- Food, Natural Resources
and Environmental Affairs

cc: Dr. Raymond J. Miller

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NASULGC National Association of State Universities and Land-Grant Colleges

TABLE 1
SUMMARY OF FUNDING RECOMMENDATIONS
FOR RESEARCH, EXTENSION, HIGHER EDUCATION
AND INTERNATIONAL AGRICULTURE
(In Thousands of Dollars)

	FY93 APPROPS	FY94 PRESIDENT REQUEST	FY94 NASULGC RECOMMENDATION
BASE PROGRAM			
Research	220,269	229,653	239,867
Extension	288,452	298,802	304,907
Higher Education	2,850	2,850	2,850
TOTAL	**511,571**	**531,305**	**547,624**
SPECIAL PROGRAMS			
Research			
NRI	97,500	130,195	130,195
Special Grants	26,775	34,418	46,468
Special Problem Grants	46,636	0	0
Other Research Grants	13,168	14,511	20,111
International Research	0	0	2,000
TOTAL	**184,079**	**179,124**	**198,774**
Extension			
National Priorities	22,875	28,375	43,875
Specified Programs	104,138	98,443	110,819
International Extension	0	0	625
TOTAL	**127,013**	**126,818**	**155,319**
Higher Education			
National Needs Grants	15,250	17,639	20,597
International Education	0	0	500
TOTAL	**15,250**	**17,639**	**21,097**
FEDERAL ADMINISTRATION			
Net Research	10,545	2,141	2,141
Net Extension	9,283	5,644	5,644
TOTAL NET	**19,828**	**7,785**	**7,785**
SUMMARY			
Total Research	414,893	410,918	440,782
Total Extension	424,928	431,264	465,870
Total Higher Education	18,100	20,489	23,947
GRAND TOTAL	**857,741**	**862,671**	**930,599**

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TABLE 2
RESEARCH FUNDS
(In Thousands of Dollars)

	FY93 APPROPS	FY94 PRESIDENT REQUEST	FY94 NASULGC RECOMMENDATION
BASE PROGRAMS			
Hatch Act	168,785	173,451	177,224
McIntire-Stennis	18,533	28,045	28,045
Evans-Allen (1890)	27,400	28,157	28,770
Animal Health	5,551	0	5,828
TOTAL BASE PROGRAMS RESEARCH	**220,269**	**229,653**	**239,867**
RESEARCH GRANTS--PL 89-106			
Competitive Grants (sec. 2b)(NRI)			
Plant Systems	40,000	45,195	45,195
Animal Systems	25,000	30,000	30,000
Nutrition, Food Quality and Health	6,500	13,000	13,000
Natural Resources and Environment	18,000	26,000	26,000
Engineering Processes and Value-Added	4,000	9,000	9,000
Markets, Trade and Policy	4,000	7,000	7,000
SUBTOTAL COMPETITIVE GRANTS	**97,500**	**130,195**	**130,195**
Special Research Grants (sec. 2c)			
National Programs			
Animal Health	0	0	3,000
Animal Well-Being	--	0	3,000
Energy Biomass/Biofuels	--	1,000	1,000
Pest Control Strategies			
Integrated Pest Management	4,457	7,000	7,000
Pesticide Clearance	3,500	10,000	10,000
Pesticide Impact Assessment	2,968	2,968	2,968
Minor Use Animal Drugs	464	650	650
Biological Impact Assessment	300	300	300
Rural Development Centers	500	500	550
Tropical and Subtropical Ag	3,320	0	0
Water Quality	8,950	9,000	9,000
Global Change	2,000	3,000	3,000
Solid Waste Management	--	--	3,000
Strengthening the Rural Workforce	--	--	3,000
SUBTOTAL NATIONAL SPECIAL GRANTS	**26,459**	**34,418**	**46,468**
SUBTOTAL REGIONAL/STATE SPECIAL GRANTS	**46,952**	**0**	**0**
TOTAL SPECIAL GRANTS	**73,411**	**34,418**	**46,468**
GRAND TOTAL RESEARCH GRANTS	**170,911**	**164,613**	**176,663**

TABLE 2
RESEARCH FUNDS (continued)
(In Thousands of Dollars)

	FY93 APPROPS	FY94 PRESIDENT REQUEST	FY94 NASULGC RECOMMENDATION
OTHER RESEARCH PROGRAMS			
Rangeland	475	489	1,000
Aquaculture Centers	4,000	4,111	4,111
Supplemental and Alternative Crops	1,168	3,000	3,000
Sustainable Agriculture	6,725	6,911	10,000
1890 Institution Centers of Excellence	--	--	2,000
Weather Information Systems	400	0	0
Critical Materials	400	0	0
TOTAL OTHER RESEARCH PROGRAMS	**13,168**	**14,511**	**20,111**
FEDERAL ADMINISTRATION			
Direct	20,795	13,641	13,641
1890 Capacity Building Grants	(10,250)	(11,500)	(11,500)
NET FEDERAL ADMINISTRATION	**10,545**	**2,141**	**2,141**
INTERNATIONAL RESEARCH	--	--	**2,000**
GRAND TOTAL RESEARCH	**414,893**	**410,918**	**440,782**

TABLE 3
EXTENSION FUNDS
(In Thousands of Dollars)

	FY93 APPROPS	FY94 PRESIDENT REQUEST	FY94 NASULGC RECOMMENDATION
BASE PROGRAMS			
Smith-Lever	262,712	270,000	275,847
D.C. Extension	1,010	1,038	1,060
1890 Colleges and Tuskegee	24,730	27,764	28,000
TOTAL BASE PROGRAMS EXTENSION	**288,452**	**298,802**	**304,907**
NATIONAL EXTENSION PRIORITIES			
Water Quality	11,375	11,375	11,375
Food Safety and Quality	1,500	2,000	3,000
Rural Economic Development	--	--	2,000
Sustainable Ag Systems	--	3,000	10,000
Youth and Families at Risk	10,000	12,000	12,000
Solid Waste Management	--	--	3,000
International Extension	--	--	625
1890 Special Targeted Programs			
Teen Pregnancy/Health	--	--	750
Alternative Ag/Small-Scale Farmers	--	--	750
Rural Economic Development/Leadership	--	--	250
Family/Child Prenatal to Five	--	--	750
TOTAL NATIONAL EXTENSION PRIORITIES	**22,875**	**28,375**	**44,500**
SPECIFIED PROGRAMS			
EFNEP	60,525	62,201	63,551
Rural Development Centers	950	950	1,045
Integrated Pest Management	8,200	8,565	10,000
Pesticide Impact Assessment	3,405	3,405	3,700
Urban Gardening	3,557	0	3,557
Rural Health and Farm Safety	2,720	1,000	2,720
Reservation Extension Agents	1,750	0	2,000
1890 Extension and Research Facilities	8,000	8,000	8,000
Renewable Resources Extension Act	2,765	3,841	3,841
Pacific Rim Program	647	0	647
Crop Simulation	498	0	498
Farmer Assistance Grants	2,550	0	0
Ag Telecommunications	1,221	1,221	2,000
Rural Health and Safety Education	2,000	2,000	2,000
Assistance for Disadvantaged Farmers/Ranchers	1,000	0	0
Nutrition Education	3,530	7,060	7,060
Rural Technology Grants	1,000	0	0
New Uses	--	200	200
TOTAL SPECIFIED PROGRAMS	**104,318**	**98,443**	**110,819**

TABLE 3
EXTENSION FUNDS (continued)
(In Thousands of Dollars)

	FY93 APPROPS	FY94 PRESIDENT REQUEST	FY94 NASULGC RECOMMENDATION
FEDERAL ADMINISTRATION			
Direct	10,428	5,644	5,644
Pacific Rim Program	(647)	0	See Above
Crop Simulation	(498)	0	See Above
NET FEDERAL ADMINISTRATION	**9,283**	**5,644**	**5,644**
GRAND TOTAL EXTENSION	**424,928**	**431,264**	**465,870**

TABLE 4
HIGHER EDUCATION FUNDS
(In Thousands of Dollars)

	FY93 APPROPS	FY94 PRESIDENT REQUEST	FY94 NASULGC RECOMMENDATION
BASE PROGRAMS			
Morrill-Nelson	2,850	2,850	2,850
TOTAL BASE PROGRAMS HIGHER EDUCATION	**2,850**	**2,850**	**2,850**
NATIONAL NEEDS COMPETITIVE GRANTS			
Graduate Training Fellowships	3,500	3,597	3,597
Minority Scholars Program	--	1,000	1,000
Institution Challenge Grants	1,500	1,542	4,000
1890 Capacity Building Grants	10,250	11,500	11,500
Telecommunications	--	--	500
TOTAL NEEDS GRANTS	**15,250**	**17,639**	**20,597**
INTERNATIONAL HIGHER EDUCATION	**--**	**--**	**500**
GRAND TOTAL HIGHER EDUCATION	**18,100**	**20,489**	**23,947**



NASULGC National Association of State Universities and Land-Grant Colleges

March 30, 1993

The Honorable Richard J. Durbin
Chairman
Subcommittee on Agriculture, Rural Development, Food
and Drug Administration, and Related Agencies
Committee on Appropriations
2362 Rayburn House Office Building
U. S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Dr. Raymond J. Miller, Chair of the FY 1994 Budget Committee of NASULGC's Board on Agriculture, will present oral testimony to your Subcommittee on behalf of the 1994 Budget Committee. However, members of the Budget Committee have prepared written statements for the record in relation to Fiscal Year 1994 appropriations. As requested, twenty-five (25) copies of each statement are enclosed for inclusion in the hearing record on Fiscal Year 1994 appropriations.

The statements included in this transmission are from:

Dr. Raymond J. Miller, Chair of the FY 1994 Budget Committee
Dr. C. Peter Magrath, President of NASULGC
Dr. C. Colin Kaltenbach, ESCOP Representative
Dr. B. K. Webb, ECOP Representative
Dr. John M. White, ACOP Representative
Dr. David O. Hansen, ICOP Representative
Dr. Sunil K. Pancholy, 1890 Research Directors Representative
Mr. Gilbert Tampkins, 1890 Extension Directors Representative
Dr. Sandra A. Helmick, Board on Home Economics Representative
Dr. John M. Bowen, Board on Veterinary Medicine Representative

Please do not hesitate to contact me whenever I can be of any assistance.

Sincerely,

Eddie G. Gouge
Assistant Director
Federal Relations -- Food, Natural Resources
and Environmental Affairs

Enclosures

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NASULGC National Association of State Universities and Land-Grant Colleges

TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

BOARD ON AGRICULTURE
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

DR. RAYMOND J. MILLER

CHAIR, FISCAL YEAR 1994 COMMITTEE, NASULGC BOARD ON AGRICULTURE

AND

PRESIDENT, MARYLAND INSTITUTE FOR AGRICULTURE AND NATURAL RESOURCES
AT
UNIVERSITY OF MARYLAND SYSTEM, ADELPHI

MARCH 31, 1993

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INTRODUCTION

Mr. Chairman and members of the Subcommittee, I am Raymond J. Miller, President of the Maryland Institute for Agriculture and Natural Resources, University of Maryland System, Adelphi. I am presently serving as chair of the FY 1994 Budget Committee of the Board on Agriculture, NASULGC. The opportunity to include my full statement in the hearing record is very much appreciated.

Thanks in large part to America's public investment in education, research, and extension our agriculture is one of this nation's greatest success stories. The return on that investment has been remarkable.

Output has doubled since 1950 while conventional inputs have declined.

Our agriculture now earns foreign exchange utilizing only 2% of the nation's resources while supplying 12% of the nation's exports.

In 1990 U.S. consumers saved approximately $196 billion, because they paid 2.3 times less for food and fiber than they might have if technology had halted at 1950 levels.

Each $1 invested in agricultural extension, research, and education returned $10 over the typical 16-year life of that technology.

The social changes accrued by the American public are no less important. Cooperative Extension nutrition education has assisted thousands of low income families to improve their diet and health thereby saving millions of dollars in health care.

4-H is the largest youth-serving nonformal educational program in the nation reaching 5.5 million young people across the nation--rural, small town, suburban, and urban settings--and across all races, ethnicities and economic status.

American agriculture's protection of our environment and natural resources is no less important. Agricultural technology has reduced by 393 million acres the prime farmland required to meet the nation's needs for food production.

And technology along with improved farming practices have also reduced soil erosion by a factor of six over erosion rates of the 1930s.

But the important point that must be made is that if we fail to maintain our current pace of producing new technology, erosion and urbanization will outpace agricultural productivity and depreciate rural well-being in a very short time.

CONTINUING THE SUCCESS

Of course, it would be tempting to leave research, development and technology transfer to the private sector. However, we would be unwise to rely on such a plan. Numerous agricultural techonologies have high social and environmental payoffs but low returns for private firms making these technologies unattractive to the private sector. In addition to new technology, much of the investment in agricultural research is utilized for the development of human resources, a most essential activity that private industry is not prepared to conduct.

It seems clear then that in order to continue the important task of maintaining American agricultural superiority to insure affordable safe food, a stable environment and rural social economic improvement, we will have to rely on public investment in science and education.

Although agricultural productivity continues to grow, it is growing at a slower pace. If productivity continues to slow, real food prices will soon rise. As an example, it is estimated that approximately twenty significant technological developments would need to be developed and adopted in the 1990s simply to maintain productivity gains at the 1990 rate. All of this underscores the need for continued investments in public and private research, extension and education efforts with the public sector, especially prominent in providing basic and other "public good" research along with technology transfer and education. In this manner we can ensure continued productivity of one of the nation's greatest success stories, and in so doing protect the standard of living and social well-being of future generations of Americans.

FY 94 BUDGET PRIORITIES

This is the rationale behind the FY 1994 NASULGC budget priorities for agricultural research extension and higher education. These priorities were identified through a process of nationwide consultation within the land-grant community and mirror the national priorities established by the Joint Council on Food and Agricultural Sciences.

The two over-arching priorities that define our FY 1994 budget recommendations are:

1. **Strengthen Base Programs for Research, Extension and Higher Education**

Base funds for research are appropriated under Hatch, McIntire-Stennis, Evans Allen and Animal Health legislation; extension base funds are appropriated under Smith-Lever 3b and 3c, D.C. Extension and 1890 Colleges and Tuskegee Extension Acts. The Morrill-Nelson Act provides base funds for higher education.

These funds provide for the essential continuing support of the infrastructure within which long- and short-term projects and programs can be conducted efficiently. Specifically, base funds:

- Assure that a stable resource base of personnel and facilities is in place in every state and territory to anticipate and deal with short- and long-term societal concerns.
- Provide for the flexibility needed to respond to changing needs and priorities.
- Provide initial capacity to focus on contemporary priority issues on the national agenda.
- Undergird a system for the continuing education of youth and adults and for the delivery of knowledge and technology to consumers.
- Provide networking capabilities to enhance communications nationwide and within regions.
- Provide highly cost-effective leveraging of significant state, county and private-sector support.

Erosion of base funds over more than a decade has impaired the ability of the system to meet critical state and national research and extension needs. Major redirection of these funds to focus on contemporary issues already has occurred at most land-grant universities. Many universities have been forced to reduce their faculty and extension staff at a time when the needs for science-based research and extension have escalated dramatically. Reversal of this erosion in base funding is essential to maintain the basic infrastructure for research and extension.

An increase of 5.0 percent in base funds for research, extension, and education is needed to offset anticipated inflation in Fiscal Year 1994 and to help rebuild capacity after nearly a 20 percent decline in real funding levels since 1980.

2. **Advance Special Initiatives in Support of the Food, Agriculture and Environmental System**

Major public investments are needed to assure the continuation of a dynamic food, agriculture, and environmental system of research, extension and instruction which anticipates information needs on a global scale while maintaining a sound base from which to respond.

Assessing need and changing focus requires special research and extension initiatives such as the National Research Initiative and programs on water quality, youth at risk, food safety and sustainable agriculture. Base funding sustains the infrastructure of information, expertise and facilities from which new initiatives emanate, but each requires funding to advance a competitive U.S. agriculture, food and environmental system.

These initiatives are undertaken thorough individually-funded programs which address priorities for FY 1994 as established by the Joint Council on Food and Agricultural Sciences. These five important national priorities are:

1) Attain sustainable agricultural systems that are compatible with environmental and social values.
2) Develop scientific and professional expertise to advance new technologies.
3) Address critical social issues in a changing society.
4) Enhance the global competitiveness of U.S. agriculture.
5) Provide a safe, affordable and nutritious food supply.

Several key new initiatives that address these important national priorities are the Institutional Challenge Grant Program for Higher Education, the National Research Initiative, the International Agricultural Program Initiative, Youth and Families at Risk, and the 1890 Capacity Building Program. Initiatives of this type complement base programs which undergird the infrastructure of the research, extension, and teaching programs of the land-grant system. And this system complements and accentuates the effectiveness of the overall science and education effort of the USDA.

CONCLUSION

Distinguished citizens representing all phases of the land-grant system have labored diligently to prepare what we feel is a reasonable yet effective budget for FY 1994. This budget addresses critical national priorities and provides solutions to important problems in agricultural production, environmental and natural resource stewardship, and rural social and economic welfare.

We appreciate the opportunity to present this budget and its rationale and trust that you will consider favorably our suggestions.

OTHER ITEMS FOR THE RECORD

Mr. Chairman, I respectfully request that you accept two additional items for the record:

1. A statement by NASULGC President C. Peter Magrath concerning agricultural research facilities. I have the statement with me.

2. Our Science and Education budget recommendations for FY 1994 which I shall send to the committee following the submission of the President's budget to Congress next month.

I hope that you will agree to this request.

Thank you.

Experiment Station Committee on Organization and Policy

Experiment Station Section
The Division of Agriculture
National Association of State University and Land-Grant Colleges

ESCOP

JAMES R. FISCHER

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TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

EXPERIMENT STATION COMMITTEE ON ORGANIZATION AND POLICY (ESCOP)
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

DR. COLIN KALTENBACH

DIRECTOR, ARIZONA AGRICULTURAL EXPERIMENT STATION
AT THE
UNIVERSITY OF ARIZONA, TUCSON

MARCH 31, 1993

Written Testimony of
The Experiment Station Committee on Organization and Policy
National Association of State Universities and Land-Grant Colleges

Submitted by

Colin Kaltenbach, Director
Arizona Agricultural Experiment Station and
Chairman, ESCOP FY 94 Budget Subcommittee

The Experiment Station Committee on Organization and Policy (ESCOP) thanks you for the opportunity to present this testimony on behalf of the FY 94 Budget Committee, Board on Agriculture, National Association of State Universities and Land-Grant Colleges (NASULGC). The 105-year Federal-State partnership in support of agricultural research has developed the world's most productive and efficient system for the production of food and fiber. Numerous studies have shown that annual rates of return on investments in research for agriculture are in the 30-60 percent range, several times that typically obtained from conventional investments in other enterprises.

Agriculture is our nation's oldest, largest, and only essential industry. The very success of research in agriculture has led to some temporary surpluses giving the perception that further investments in research are not a priority. In fact, investments in agricultural research have never been more essential. We are expected to meet the challenge of feeding a population that is predicted to double to 10 billion by the mid-21st century while protecting our natural resource base of soil, water, and genetic diversity. To meet such a challenge we must increase our scientific knowledge and develop new technology. This cannot be done without both short-term and long-term investment.

An infrastructure consisting of facilities, laboratories, equipment, farms, and research scientists is in place throughout the nation to assist in this effort. Unfortunately, federal formula funds have eroded for more than a decade and state appropriations have also been severely reduced over the last few years. The result is a loss in capacity for the State Agricultural Experiments Station System to meet new challenges that occur on a yearly basis. The Russian Wheat Aphid and Sweetpotato Whitefly are but two examples of recent challenges that required immediate and substantial resources to prevent devastating consequences. We are requesting a 5% increase in formula funding for FY 94 to maintain research capacity.

The National Research Initiative, developed and justified as a $500 million initiative, is currently funded at only $97.5 million. This highly successful program supplies, on a competitive basis, technicians, graduate students, and other inputs needed for critical projects in six major areas including Natural Resources and the Environment, Food Safety, and New Processes and Products. Funding for FY 94 of at least $162 million is requested to keep this high priority, productive program moving forward.

In addition to the National Research Initiative, we seek to expand programs in Sustainable Agriculture, Alternative Crops, Integrated Pest Management and Biocontrol, Pesticide Clearance, Animal Health and Well-Being, and Rangelands. These important programs, funded with special grants and authorizations, address high priority national, regional and state problems including efforts which add value to traditional agricultural products.

Global competitiveness and environmental degradation are major societal concerns. These two issues often lead to positions that seem irreconcilable. Some view new technology as potentially environmentally hazardous while others feel environmental regulations are economically constraining. In fact, advances in research can provide the means to move both the environmental and economic agendas forward in a positive manner.

We seek funding for three new initiatives; Solid Waste Management, Forestry Ecosystem Management and Strengthening the Rural Workforce through stability and well-being of families, youth, and the elderly. Virtually every city and community faces solid waste management problems that require research-based solutions. Vice President Gore has stated that "forests represent the single most important stabilizing feature of the Earth's land surface." Improved management of our forest resources requires new scientific knowledge and technological development. Advances in American technology and maintenance of an economic advantage requires a capable work force provided by stable families and communities. Traditional approaches for educating the technical work force, targeting markets, and satisfying consumers will not work in a society with a changing cultural composition, family organization and community structure. The scientific research base underlying emerging Cooperative Extension initiatives on families, communities, and rural development needs to be strengthened.

Publicly funded agricultural research is an investment in the future of this country. A safe, affordable, and reliable food supply is an essential guarantee that our government must make to its people. This budget request for agricultural research is the product of a comprehensive strategic planning process beginning with users of the products of research at the state level and ultimately passed through the NASULGC structure to the USDA Joint Council on Food and Agricultural Sciences.

I urge the members of this Subcommittee and the Congress to achieve the agricultural research funding levels proposed by the National Association of State Universities and Land-Grant Colleges.



Academic Programs Committee on Organization and Policy

Academic Programs Section
The Board on Agriculture
National Association of State Universities and Land-Grant Colleges

TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

ACADEMIC PROGRAMS COMMITTEE ON ORGANIZATION AND POLICY (ACOP)
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

DR. JOHN M. WHITE

ASSOCIATE DEAN, COLLEGE OF AGRICULTURE AND LIFE SCIENCES
AT
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

MARCH 31, 1993

TESTIMONY
Presented by

John M. White, Chairman
Academic Programs Section
FY 1994 Budget Committee

to the

Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies

Committee on Appropriations
U.S. House of Representatives

Mr. Chairman and members of the Subcommittee, I am John M. White, Associate Dean and Director of Academic Programs of the College of Agriculture and Life Sciences at Virginia Polytechnic Institute and State University. I am also Chair of the FY 1994 Budget Committee for the Academic Programs Section of the National Association of State Universities and Land-Grant Colleges (NASULGC). The opportunity for inclusion of my full statement in the hearing record is very much appreciated.

My testimony is offered in support of the NASULGC FY 1994 Budget request. The Academic Programs Section requests funding to support Higher Education initiatives in the food, agriculture and natural resources sciences. This strategic investment in higher education will facilitate the development of human resources through graduate and undergraduate instruction and ensure greater access to quality education for all American youth.

This request has become even more important because of the national realization that educated and trained human capital is a critical national resource and, as such, a key federal responsibility. The recent report issued by the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET) offered suggestions for federal agencies regarding support of our higher education system. "There is rising concern that the greater rewards associated with research, accentuated by patterns of federal support, may be having adverse effects on the quality of undergraduate education. Federal agencies should examine the impact of federal research support on university undergraduate and graduate education and identify strategies to ensure against unintentional degradation of the educational mission and excellence of the research-intensive universities."

A second report issued by the President's Council of Advisors on Science and Technology, chaired by the President's science advisor, raised the same concerns and shared similar recommendations. "Universities should reemphasize teaching in all its aspects, both inside and outside the classroom...The federal

agencies should ensure that their programs encourage universities to reemphasize education rather than discourage them, even inadvertently." Among the specific recommendations offered were for "increasing direct senior faculty involvement in teaching, and an increased involvement of undergraduates in hands-on frontier research." These and other recommendations are addressed by the academics programs of the office of Higher Education Programs of the USDA.

Recent testimony before the subcommittee of the House Science, Space and Technology Committee reiterated this concern. The committee took note of several witnessed recommendation that "if federal agencies follow the lead of the NSF and broaden the base of funding for universities to embrace the full range of scholarly activity, an important concomitant will be increased attention to teaching and the integration and application of knowledge." The academic programs of the Office of Higher Education Programs provide the USDA with the opportunity to broaden its base of funding.

Mr. Chairman, the Academic Programs Section of NASULGC feels it is critical that we recapture excellence in the United States' higher education system in agriculture, home economics, natural resources sciences, and veterinary medicine. It is essential that sufficient investments be made to insure the availability of a critical mass of creative scientists and professionals capable of solving the complex problems facing the food and fiber industries, and to help feed a hungry world. Funds requested to support USDA programs in higher education are for the explicit purposes of enriching the quality of the educational experience, enriching the quality of the student body and expanding ethnic and cultural diversity of students enrolled in Colleges of Agriculture and related sciences. Such an investment in human capital will pay major dividends by producing a sufficient and highly competent work force serving all Americans through food, agriculture and natural resources sciences.

The Academic Programs Section request for FY 1994 Higher Education programs will be used as follows:

Institution Challenge Grants
Graduate Fellowships Grants
Minority Scholars Grants
1890 Capacity Building Grants
Telecommunications
International Higher Education Grants
Morrill-Nelson Program

Institution Challenge Grants

The funds requested are directed toward targeted national problems. These highly competitive challenge grants help to promote innovative academic programs, enhance faculty quality, promote university partnerships with industry and among other colleges and universities, and stimulate non-Federal support for higher education via a matching requirement.

Projects supported focus on curricula design and materials development, faculty preparation and enhancement, instruction delivery systems, and student experiential learning.

Graduate Fellowship Grants

This high priority program requests funding to support competitive graduate training grants to outstanding U.S. scholars who desire to pursue studies in targeted critical national priority areas in the food and agricultural sciences. **Doctoral and masters'** students will be supported in the targeted specializations: viz; Food, Forest Products, Agribusiness Management and Marketing; Plant and Animal Biotechnology; Food Science/Human Nutrition; Agricultural Engineering; and Water Science.

Since the initiation of this program in 1984, funding has been sufficient only to support a total of 675 graduate stipends. These intellectually superior Doctoral and Masters' scholars had average GRE scores of 1300 and 1050, respectively. The success rate of these students is extremely high.

Minority Scholars Grants

This new program is designed to increase the ethnic and cultural diversity of the food and agricultural scientific work force necessary to meet the demands of the decade. A more proactive plan by the Land-Grant Colleges and Universities, with USDA and Congressional support, is required in order to advance minority higher education and mainstream the development of minority scientists. The funds requested will be used to support new minority students, through the baccalaureate degree, in the food and agricultural sciences.

1890 Capacity Building Grants

It is the expressed goal of the USDA to assist the 1890 institutions through this funding, to significantly strengthen and broaden academic and research programs through the establishment of new areas of excellence and the enhancement of existing ones. Funds are targeted to support curricula design and materials development, faculty preparation and enhancement, instruction delivery systems, student experiential learning, and high priority research initiatives.

The 1890 Land-Grant Institutions and Tuskegee University are a valuable and irreplaceable component of the U.S. higher education system in food, agriculture, and natural resource sciences. This competitive program responds to the need to advance the capacity of these institutions in teaching and research, and to advance partnerships with industry and institutions.

Telecommunications

Advances in telecommunications have opened new opportunities for addressing the rapidly changing educational needs of U.S. agriculture. A newly established Agricultural Satellite corporation (AG*SAT) is designed to enhance the competitiveness of America's agriculture by sharing (via satellite-transmitted courses, conferences, and seminars) rapidly expanding scientific knowledge and technology among students, teachers, producers, processors, distributors, and agribusiness. The funds requested will be used to support the management of a national system of satellite communication for academic program delivery.

International Higher Education Grants

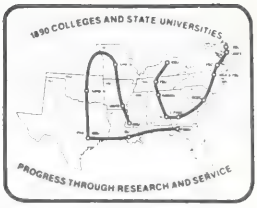
For this program, we request funds to enhance the global competitiveness of U.S. agriculture by assisting U.S. universities to prepare graduates capable of competing internationally. Internationalizing higher education programs will require support to: (1) develop or expand curricula on global agriculture and add global dimensions to domestically-oriented core curricula; (2) support first-professional experiences in foreign agriculture for faculty; and (3) support international agriculture internships for U.S. students.

Morrill-Nelson Program

This is the only permanent authorization in support of higher education in the food and agricultural sciences. The funds are used for faculty salaries, curricula development, and other instructional operating expenses. Funds are distributed equally among the states.

Mr. Chairman, and members of the Subcommittee, the Academic Programs Section of the National Association of State Universities and Land-Grant Colleges appreciates the opportunity to provide testimony in support of Higher Education Programs in the food and agricultural sciences and asks that full consideration be given to our request.

Association of Research Directors, Inc.
OFFICE OF THE CHAIRMAN



TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

1890 RESEARCH DIRECTORS
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

DR. SUNIL K. PANCHOLY

DIRECTOR, AGRICULTURAL RESEARCH
AT
FLORIDA A&M UNIVERSITY



"100 YEARS OF PROGRESS
THROUGH TEACHING,
RESEARCH AND SERVICE"

MARCH 31, 1993

"A NON-PROFIT ORGANIZATION"

Sunil K. Pancholy, Ph.D.

Representative of the Association of Research Directors, 1890 Universities and Tuskegee, on the FY '94 Budget Committee, Board on Agriculture, National Association of State Universities and Land-Grant Colleges (NASULGC). Research Director, Florida A&M University, Tallahassee, Florida.

Testimony

The Association of Research Directors (ARD) strongly supports the two top priorities and the total budget recommendations for FY '94 submitted by the Budget Committee, Board on Agriculture, NASULGC. An increase of 5.0 percent in base funds for research is being requested. These programs represent the long-term commitment of Land-Grant Universities to maintain a stable research base including personnel and facilities in the fields of agriculture and food sciences, natural resources and environmental sciences.

We strongly support the recommendation for an increase of 5.0 percent in base funds for the EVANS-ALLEN BASE PROGRAM at the 1890 Land-Grant Institutions in FY '94. These funds provide the principal support to conduct basic and applied research to ensure a safe, economical and adequate food supply, promote a sustainable environment, conserve the natural resource base, and contribute to the improvement of the socio-economic well-being and overall quality of life of diverse rural and urban populations. These funds also contribute to the development of professional expertise (especially, minority students) in the food and agricultural sciences through focused research programs.

We strongly support the recommendation for funding the 1890 CAPACITY BUILDING GRANTS PROGRAM at $13 million in FY '94. This program is critical in enhancing teaching and research programs at the 1890 Land-Grant Institutions and in advancing partnerships with industry, USDA agencies and other institutions of higher learning. Results from the previous three fiscal years have shown that this is a highly competitive program which helps in building both research and teaching in food and agricultural sciences on these campuses.

We also strongly support two programs that were authorized in the Food, Agriculture, Conservation and Trade Act of 1990: 1890 FACILITIES GRANTS ($8 MILLION) and 1890 INSTITUTION CENTERS ($2 MILLION). The facilities program enables the 1890 Institutions to provide opportunities and state-of-the-art facilities and equipment for scientists and students. The appropriation for the 1890 Institution Centers would provide for the establishment of five National Centers.

Association
of Administrators
of Home Economics

In State Universities and Land Grant Colleges, Inc.

TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD
AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

BOARD ON HOME ECONOMICS
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

DR. SANDRA A. HELMICK

ASSOCIATE DEAN, COLLEGE OF HOME ECONOMICS AND EDUCATION
AND
ASSISTANT DIRECTOR, OREGON AGRICULTURAL EXPERIMENT STATION
AT
OREGON STATE UNIVERSITY

MARCH 31, 1993

Testimony
of
Sandra A. Helmick

Associate Dean, College of Home Economics and Education,
Oregon State University, and
Assistant Director, Oregon Agricultural Experiment Station
Representing:
the Board on Home Economics
Commission on Food, Environment, and Renewable Resources
National Association of State Universities and Land-Grant Colleges

Mr. Chairman and members of the subcommittee:

The Board on Home Economics, on behalf of which I deliver these statements, represents the scientists of the nation's land-grant and state universities who have expertise in the area of human nutrition, child development, consumer sciences, family relations and other fields related to the well-being of family members. These academic professionals work to develop new knowledge, teach it to the next generation of family and consumer science professionals, and deliver it to the public through extension programs in each state.

Within this corps of scientists is the expertise to contribute substantially to each of the identified goals for the teaching, research, and extension programs of the land-grant university system.

Address Critical Social Issues in a Changing Global Society

The human costs of rapid change in the nation's social fabric and economic viability are tremendous as declining industries and deteriorating infrastructure place a burden on the residents of both urban and rural communities. The expertise to assist those affected by these changes exists in the land-grant system and can be delivered through extension programs that empower families and communities to seek positive growth in times of transition.

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Increased attention needs to be given to the workforce in rural communities. A critical component of economic development in rural areas will be the productive capacity of the labor force. Rural youth need educational programs that bring them to a competitive position with skills for a technological age and affirmation of a work ethic that supports a productive workforce. Underlying these programs to enhance rural human capital must be a research base that is relevant to the social circumstances of the 1990s. The special funding request for research on the rural workforce will support this targeted need.

The nation's concern for environmental protection leads to dissension in communities most affected by the constraints on natural resource industries such as logging and fishing and on manufacturing processes that produce negative externalities for the surrounding area. The social scientists in the land-grant universities have proven to be instrumental in resolving these conflicts through programs of conflict resolution, mediation, and negotiation. These are expanding areas of need for service delivery from the universities to the communities.

The cost and accessibility of health care in rural areas has already received targeted attention by the President's task force on health care. As the nation makes dramatic changes in the manner in which health care is provided and financed, research and educational programs related to health care policy need to be enhanced so that the interests of residents of rural communities are well represented in the national deliberations.

Provide a Safe, Affordable, and Nutrition Food Supply

Diet is recognized as critical in maintaining good health, although the relationship is more complex today than when we first learned that the intake of certain nutrients directly prevented certain illnesses. Many questions remain to be answered before we can recommend with assurance dietary guidelines that will reduce the incidence of cancer, osteoporosis, or cardiovascular disease. The research challenge is increased even further when environmental variables such as air and water quality and lifestyle practices such as smoking and exercise must be considered as contributing factors.

Even when these relationships are specified and confirmed, there remains the challenge to motivate people to make healthy food choices. The scientific expertise that exists within the group I represent is capable of not only determining the components of a healthy diet but also of understanding the preferences of the food consumer and how to influence dietary choices.

The food supply available to US consumers is more diverse and accessible than anywhere in the world as a result of abundance in production and efficiency in distribution. The purchasing power held by these consumers supports a high standard for quality in food products. Consumers increasingly seek to reduce risks to health and safety in the products they use, including automobiles, textiles, and pharmaceuticals, as well as food. Researchers need to assess the nature of consumer concern for safety in food products so there is an informed basis for educational programs for producers and consumers that will reduce unwarranted consumer anxiety and address substantiated problem areas in the production, processing, and distribution sectors. Again, the scientific expertise required must come from the behavioral and social sciences that can explore the consumer as well as the biological sciences that are fundamental to research on the food product itself. This combination of expertise exists side-by-side within the programs I represent.

Enhance the Global Competitiveness of U.S. Agriculture

At this critical time for the viability of the U.S. economy in the world market, it is important that scientists address the potential of new products and new markets. The expertise that exists in programs of apparel, textiles, housing, and food science should be applied to a better understanding of the needs of the world consumer so that U.S. products can be designed, produced, and distributed in a manner that maximizes our competitive position.

Attain Sustainable Agricultural Systems That Are Compatible With Environmental and Social Values.

The nation's concern for protection of the natural environment as well as viability of critical social systems needs to be communicated with a reasoned voice; the objectivity and insight to do so exists within the social and behavioral science programs of the land-grant universities. The research tools to assess public opinion and the mechanisms to deliver the results to policy makers in the private and public sector also are part of the capability of the land-grant system.

Develop Scientific and Professional Expertise to Advance New Technologies and Global Relationships

Higher education is being challenged by new demands and declining resources. All of the afore-mentioned goals require a corps of scientists that have the latest methods and technologies to deliver the best science possible. The increasing diversity of the workforce must be recognized in the recruitment and education of the college student population. A national commitment to "putting people first" mandates the enhancement of the scientific expertise that exists in the human sciences -- nutrition, child development, consumer sciences, family relations, gerontology -- so that well-prepared professionals stand ready to meet the challenges of the next century.

The historic partnership of the federal government, the state universities, and local communities is a model for research and education that sets a standard for the rest of the world. This system of discovery and dissemination of new knowledge stands ready to serve the nation at this critical time. The daily needs and concerns of our citizens are gaining attention--food safety, youth development, job security, access to health care, well-being of the elderly. Within the programs represented on the Board of Home Economics of the land-grant organization exists the potential for effective assessment and interpretation of these needs and concerns, and for education programs designed in response to those needs whether delivered in community, workplace, or home settings.



NASULGC National Association of State Universities and Land-Grant Colleges

TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

BY

DR. C. PETER MAGRATH

PRESIDENT,
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

MARCH 31, 1993

One Dupont Circle, NW Suite 710 • Washington, DC 20036 - 1191 • (202) 778-0818 • Fax (202) 296 - 6456

STATEMENT TO THE SUBCOMMITTEE
ON AGRICULTURE, RURAL DEVELOPMENT
FDA AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

Mr. Chairman, distinguished members of the subcommittee, I am C. Peter Magrath, President of the National Association of State Universities and Land-Grant Colleges (NASULGC). I am pleased to present this statement for the record today to emphasize once more the critical national problem of the erosion suffered by our national agricultural research infrastructure due to funding neglect over the past two decades.

Modern agriculture is science-based. Just as our current capacity to produce rests on knowledge developed in the past, the ability of American agriculture to meet the future challenges of nature and global markets will depend on the quality, quantity, and availability of new research knowledge. And, just as current knowledge and technology were achieved through prior agricultural science and education investments, the future knowledge will depend on the investments we make now and in the near future. These investments include support for ongoing and future agricultural research program, the training of talented agricultural scientists for the future, and in the research tools -- laboratories, and equipment needed by agricultural scientists to conduct quality and relevant research.

Unfortunately, every analysis of the national effort in agricultural science and education concludes that we are underinvesting in all three areas of education, research and extension. Here, I will focus on the special problem of research infrastructure -- the buildings, facilities, and equipment that are requisite for quality research. Clearly, the condition and capacity of the national research infrastructure is a major factor both in the efficiency and effectiveness of the research program and in recruiting quality graduate students. Further, major investments are needed now to assure future research capacity as well as to secure a strong and vital education effort for the future.

Both the condition and capacity of our agricultural research infrastructure are in need of immediate attention. The general underinvestment in agricultural research for the past two decades has forced research administrators at federal facilities and at cooperating state universities to use their scarce resources to maintain research programs at the expense of the research infrastructure. Nearly every agricultural research facility in the nation has a backlog of needed facility renovations and new research facility construction projects that they have had to defer.

In order to address this growing problem, many universities have resorted to individual funding initiatives with Congress. A sharp increase in such activities has occurred over the past several years. Almost all of these projects are reasonable investments when considered in isolation; however, the process can be depicted as a "bandaid" that does not adequately address the need for an effective national agricultural research infrastructure.

Two years ago our association (NASULGC) endorsed a proposed plan for needed investments in agricultural research facilities which was formulated by a special USDA/NASULGC committee of distinguished scholars. The plan aims specifically at establishing a competitive grants program under authority of the Research Facilities Act of 1963 as amended, and calls for a collaborative priority-setting effort involving NASULGC, the USDA, and the Congress. I am pleased to commend that proposal to you, not only as an alternative approach to projects involving site-specific congressional initiatives but also as a process for setting up a national plan based on established priorities. The text of the proposal follows:

"RESEARCH FACILITIES PROGRAM -- A PROPOSAL

It is proposed that Congress establish a competitive facility grants program under the authority of the Research Facilities Act of 1963, as amended. The program should have two major components:

I. Competitive facility grants open to all eligible cooperating institutions. The larger component of the program would be allocated 80% of the available funds.

II. Competitive facility grants for smaller or emerging cooperating institutions. This component would be allocated 20% of the available funds. Institutions within this program would only compete with similar institutions; however, the procedures and other requirements would be the same as for the above component.

The total program should be a coordinated federal/state effort with an open, competitive selection process that will embody the following principles:

- The program should include a system for establishing priority research areas and issues.
- Solicitation of grant proposals should provide equal opportunity for all eligible and qualified institutions.
- Selection should be on a competitive, merit review basis to assure scientific quality and evidence of the institutional capacity and commitment.
- All grants will require an equal match of non-federal funds.
- Provision to assure that smaller or emerging institutions are not excluded from the program is made as noted in II. above.
- Because of the diversity and geographic distribution of agriculture, consideration of unique commodity and geographic factors may be considered in establishing priorities and selection of projects.

To implement the program within the above principles, it is proposed that:

1. The Secretary of Agriculture, in consultation with the Joint Council on Food and Agricultural Sciences, shall develop a ranked list of priority research areas in which there are significant shortages of research facilities or equipment in the system.

2. The list of priority research facility needs would be made available to eligible institutions annually.

3. Institutions submitting proposals for facility grants under the program should submit the following information:

 a. Evidence that the research program to be conducted in the proposed facility is consistent with the institution's current and projected research program.

 b. Evidence that the proposed facility, research program, and building design have been approved by the institution's central administration.

 c. Where applicable, evidence that the state will accept the increased costs and support associated with maintenance of the proposed facility.

 d. Evidence of the institution's commitment and capacity to provide the faculty, support staff, operating funds, and graduate students (as appropriate) necessary to support a quality program in the proposed facility.

 e. An outline of the proposed administrative structure and environment to encourage the formation of cross-disciplinary teams necessary to address priority research problems.

 f. Certification that the institution can and will meet the non-federal funds matching requirement of grants under the the program and identify the source of the matching funds.

4. The Secretary of Agriculture, in consultation with the President of the National Association of State Universities and Land-Grant Colleges, shall name Merit Review Panels to review and rank submitted proposals for funding. The panels should consider the following:

 a. Whether the outlined research programs and the identified facility needs fit the priority research area under which the proposal was submitted.

b. If the proposed research program/facility have technical merit and whether the proposed research is appropriate for the institution's research objectives.

c. The national level of funding available from public sources for the proposed research program. (This is to guard against over investment in some areas.)

d. Determine the projected benefits that will result from the proposed research activity, including contributions to regional and national agricultural growth and adjustment.

e. Determine, in the case of smaller or emerging institutions, the acceptability and reasonableness of the proposed method of matching the federal funds.

5. The Secretary of Agriculture shall institute an independent process to conduct feasibility studies and on-site evaluations of all proposals recommended for funding. The costs incurred for such feasibility studies and site evaluations shall be borne by the applicant. Successful applicants may apply such costs as part of their required non-federal match.

CONCLUSION

The overriding objective of this proposal is to specify ways to improve the research and graduate student training capacity of the public agricultural research system to ultimately improve the competitive position and profitability of U.S. agriculture. Improved coordination and enhanced efficiency in the use of federal and state research facility funds will result in a more effective research response to the increasingly complex problems facing U.S. agriculture. National investment in agricultural research facilities will assist agriculture in cost control, product and market development, and the safer, more effective use of our resources. All are essential if the United States is to have a viable, sustainable, profitable agricultural industry in the 21st century."

Copies of the original report of the Special USDA/NASULGC Committee entitled "American Agriculture in the 21st Century Depends on Current Research Investments" are available from:

NASULGC Board on Agriculture
Suite 710
1 Dupont Circle, NW
Washington, DC 20036-1191
Telephone: (202) 778-0858

ECOP
Extension Committee on Organization and Policy
National Association of State Universities and Land Grant Colleges
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TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

EXTENSION COMMITTEE ON ORGANIZATION AND POLICY (ECOP)
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

DR. B. K. WEBB

DEAN AND DIRECTOR, COOPERATIVE EXTENSION SERVICE
AT
CLEMSON UNIVERSITY

MARCH 31, 1993

TESTIMONY
of
B. K. WEBB
for the

National Association of State Universities and Land-Grant Colleges
Extension Committee on Organization and Policy, 1994

Mr. Chairman, I am B. K. Webb, Dean and Director for the Cooperative Extension Service at Clemson University. In my testimony today, I represent all State Directors of Cooperative Extension in the United States as the chair of their 1994 Budget Committee. Rather than enumerating each item and its budget request, my testimony will highlight the areas most in need of attention by Congress in 1994.

The highest priority for the Cooperative Extension System in 1994 is increasing base support. Other major priorities are (a) expanding funding for national initiatives and (b) providing support for the Nutrition Education Initiative.

I. KEEP BASE SUPPORT STRONG

The Cooperative Extension System is built on financial support from federal, state, and local partners. Over the past ten-year period, 1982-1991, federal support increased only an average of 3.1% per year and declined in its overall share of contributions. Funding from the three partners has failed to keep pace with inflation and the need to address issues of national importance. As a result, the majority of state Extension services are undergoing varying degrees of retrenchment. The integrated system of support which undergirds a network of Extension educators reaching into every county in the United States has eroded. A recent study reported in a trade publication indicates nearly two thousand Extension positions were lost in 28 states since 1982. Unless the pattern of funding changes very shortly, the network will be irreparably harmed.

Smith-Lever 3(b)(c): We recommend a very modest five (5) percent increase in Smith-Lever base funds. Matching funds from state and local sources are required for these funds. These core funds maintain the community-based network which is critical to the implementation of all national initiatives and base programs. Those whose major interest is in new initiatives of water quality, youth at risk, and food safety must understand that those initiatives build upon an existing network of community-based Extension personnel. Without that network, the initiatives cannot succeed. Those with a major concern for the Nutrition Education initiative must understand that the ability to reach limited resource families in rural and urban America depends upon the maintenance of the community network of Extension educators. Those whose major interest is agricultural production must understand that it is Smith-Lever (b) and (c) funds which support Extension Specialists in Colleges of Agriculture. No increase in base funds will mean further reduction in these positions.

DC Extension & 1890's: Our budget request includes an increase of only five (5) percent for DC Extension and 13.2 percent for the 1890 Land-Grant institutions and Tuskegee University. DC Extension is a key part of the system's overall effort to improve nutrition and health education to limited resource audiences. Most 1890 institutions depend entirely on federal budget support. They have made major commitments to adolescent health and teen pregnancy prevention and to education for families with children 0-5. Expanded funds will also enable them to improve their work with small scale farmers on sustainable practices.

II. SUPPORT EXTENSION NATIONAL PRIORITIES

Three high priority Extension initiatives have been started in recent years with the support of Congress. We wish to continue and expand the development of those three initiatives: Water Quality and Management, Youth and Families at Risk and Food Safety and Quality. In addition, we are particularly interested in obtaining funding to implement the sustainable agriculture sections of the 1990 Farm Bill.

Water Quality and Management: Congress has continued to appropriate additional funds each year in support of this successful coordinated multi-agency effort to improve water quality and management. Funds provided to Extension are targeted primarily to educational efforts in 74 hydrologic zones and 16 demonstration sites. We recommend an increase from $11.375 million to $13 million.

Youth and Families at Risk: Land-Grant universities have developed the finest system of non-formal education for young people. We reach 5.4 million youth through 4-H and other educational efforts. The Cooperative Extension System has recognized the serious problems confronting families and children and with Congressional help has intensified our efforts to reach youth confronting such risk factors as poverty, high incidence of drug use, teen pregnancy, and inadequate housing.

With $10 million, Cooperative Extension Service has served more than 70 communities with expanded educational programs. An independent evaluation completed in February 1993 affirmed the effectiveness of innovative approaches being used.

Food Safety and Quality: Media attention has made food safety an item of great concern to consumers, processors, food handlers, and producers. This initiative has enabled Extension to expand education programs for critical audiences in order to protect the safety of food from production to consumption.

Additional funding is requested to build upon the pilot efforts currently in place under the $1.5 million 1993 appropriation. In order to address these issues on a national scale, rather than through a handful of demonstration projects, the increase is necessary.

Sustainable Agriculture: American farms and ranchers need immediate assistance in developing management practices and technologies that will enable them to remain economically competitive and viable, while protecting the environment and natural resources. In the 1990 Farm Bill, Congress authorized the development of research and education programs that will promote sustainable agricultural production systems and practices. As part of these programs, Congress recognized the need to better train Extension Agents and other agricultural and natural resource professionals in the new technologies being developed.

A Sustainable Agriculture Technology Development and Transfer Program will advance the Cooperative Extension Service's ongoing Sustainable Agriculture Initiative and meet the Congressional mandate for increased Extension programming in sustainable agriculture through national, regional and state coordinated training and outreach programs.

The 1990 Farm Bill requires that all agricultural agents of the Cooperative Extension Service complete a national sustainable agriculture training program by 1995; all new Extension Agents are required to complete the training within 18 months of employment. In addition to Extension Agents, training will be provided to appropriate field office personnel from the Soil Conservation Service (SCS), the Agricultural Stabilization and Conservation Service (ASCS), and other professionals.

As specified in this legislation, the Cooperative Extension System is to assist in developing and facilitating the adoption of sustainable agriculture, whole farm integrated management systems, and natural resource management strategies. Those programs are to be coordinated where applicable with the Low-Input Sustainable Agriculture (Section 1621), Integrated Management Systems (Section 1627), Integrated Pest Management (Section 1650), Water Quality and Nutrient Management Research (Section 1484), and other appropriate research programs.

III. SUPPORT THE NUTRITION EDUCATION INITIATIVE

The initiative includes an increase in EFNEP funding and a new item to support nutrition education for WIC families and other limited resource families.

Limited resource audiences with either limited income or education, or both, struggle to gain access to information on nutrition. Educational programs and materials have not always been prepared with attention to diverse cultures or low literacy. These new funds will provide for a major new effort to develop appropriate materials and information and to deliver the information and education in effective ways.

This initiative builds upon excellent existing nutrition education programs in the Cooperative Extension System, including EFNEP. Therefore, with new funding, implementation will proceed immediately.

CONCLUSION

Mr. Chairman, let me assure you the Cooperative Extension System has faced up to rapid change in society and the economy and has redirected our program efforts to better serve agriculture and rural America, to address directly the growing needs of families and children in difficult circumstances, and to assist communities as they plan for a better future. These changes have not come easily, or without debate, but the System has focused on issues of greatest national importance. We seek Congressional support to keep our base programs strong and to continue to invest in these initiatives of national significance.



International Committee On Organization And Policy

International Section
The Division of Agriculture
National Association of State Universities and Land-Grant Colleges

TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD
AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

INTERNATIONAL COMMITTEE ON ORGANIZATION AND POLICY (ICOP)
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

DR. DAVID O. HANSEN

ASSOCIATE DEAN AND DIRECTOR, INTERNATIONAL PROGRAMS IN AGRICULTURE
AT THE
OHIO STATE UNIVERSITY

MARCH 31, 1993

Mr. Chairman and Members of the Subcommittee, my name is David Hansen. I am Associate Dean and Director of International Programs in Agriculture at The Ohio State University. I submit this testimony on behalf of the International Committee on Organization and Policy (ICOP), of the Board on Agriculture of the National Association of State Universities and Land-Grant Colleges (NASULGC).

The rapid spread of technological change is revolutionizing virtually all aspects of our lives, from the genetic mapping of plants to the near-instantaneous transmission of information anywhere in the world. In order for the United States to sustain a competitive advantage in the world, the U.S. science and technology base must be maintained and enhanced. The agricultural science and education programs of both USDA and the land-grant university system must consider that the prosperity of U.S. agriculture will depend on our active participation in the global science and education networks.

Developing international research, higher education and information programs that result in economic benefits to U.S. farmers can be accomplished by systematically linking the U.S. science and education community -- the land-grant system -- to its international counterparts. Global interaction can be realized in the following areas:

- Research: Collaboration with international agricultural research centers is necessary to ensure that U.S. scientists have access to state-of-the-art products and technologies. New relationships with overseas agricultural research institutes need to be established and old ones strengthened.

- Higher education: Internationalizing higher education programs will create a human resource base that can successfully contribute to the U.S. economy in the global marketplace.

- Information: Rapid access to global information is essential in order for U.S. agricultural scientists to keep pace with global scientific and technology developments.

In the 1990 farm bill, Congress authorized an enlarged role for USDA in terms of collaboration with institutions throughout the world engaged in agriculture and related research and extension activities. The international dimension of science and education, not as a separate component, but fully integrated into USDA, must be a priority. ICOP requests that this subcommittee seriously consider funding these activities in its appropriations for fiscal year 1994. We stand ready to work with you and USDA in further developing these activities.

Thank you.



NASULGC National Association of State Universities and Land-Grant Colleges

TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

1890 EXTENSION DIRECTORS
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

GILBERT TAMPKINS

ASSOCIATE ADMINISTRATOR, 1890 COOPERATIVE EXTENSION PROGRAM
AT
LANGSTON UNIVERSITY

MARCH 31, 1993

One Dupont Circle, NW Suite 710 • Washington, DC 20036-1191 • (202) 778-0818 • Fax (202) 296-6456

Mr. Chairman, I am Gilbert Tampkins, Associate Administrator for Extension at Langston University, Langston Oklahoma. On behalf of the sixteen 1890 Institutions and Tuskegee University, I am pleased to submit testimony to the Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies of the House Committee on Appropriations.

It is of special interest to the community of 1890 Institutions, and especially Extension that the new administration is taking a position of addressing issues effecting the nation which will bring more people into the mainstream who otherwise have been neglected, omitted and in some cases forgotten as it relates to opportunities for personal, social and economical development.

As the new Administration and Congress move forward to create jobs, improve the nation's infrastructure, revitalize the economy, and bring standardization in health care programs and education, they will be able to rely on the strength, knowledge base, distant education capability and in general, strong support, from the 1890 Institutions and Tuskegee University, to respond to and focus on high priority issues of rural and urban America.

As the twentieth century draws to a close, agriculture is entering into a new technological era; Rural America is in transition and needs to be revitalized; Urban American is faced with staggering and complex issues; families are at risk, and a large percent of States economy across this nation are teetering on economic omission, unclear of impending landing.

The 1890 Institutions and Tuskegee University, often overlooked and under-utilized, have done a superb job of reaching

and providing access to individuals and communities that are left out of the mainstream of today's and ultimately tomorrow's society. Extension at these institutions is concerned with educating people to adopt practices for addressing varied localized and far reaching conditions which impact upon their quality of life. Also, the appropriateness and practicality of strategic actions are concerns of Extension for existing communities within a new national and world order and to integrate the new practices and new technology into a process for meeting site specific conditions.

It is important to note that budget limitations, public policy, legislation and technological advances require close cooperation with other public sector agencies, and numerous types of private sector organizations and users. Through coalition with other agencies organizations and groups, programs are designed to provide insight into the changing economic, agriculture, social, health and environment issues.

There is a need to reach unserved, particularly underserved youth, such as youth living on limited resources, youth of color and youth living in high-risk environments. Many youth enjoy strong family support and needed protection, good health care, and an array of engaging and meaningful experience. This is certainly encouraged. But there are other youth who are living in a nation without a sense of well-being who fall prey to an environment of risk and failure and who need to be engaged in meaningful programs.

1890 Community based youth programs provide enriching and rewarding experiences for youth to acquire life skills, the

abilities to communicate, make decisions, solve problems, make plans and set goals. Also, these programs provide training to strengthen adult and youth leadership and to improve human networks to broadened commitment and energy to their strategic work for addressing youth issues. It is documented that many youth make initial life long decisions about potentially dangerous behaviors as alcohol and other drug use, sexual activity, gang involvement and dropping out of school. Programs are designed to train and equip strategically placed youth and adult volunteers in rural and urban areas. The objective of the training is to engage people in meeting critical community needs such as education, health, public safety and environmental conditions for at risk-children to live up to the fullest of their potential.

THE 1994 BUDGET SUBMISSION FOR EXTENSION AT 1890 INSTITUTIONS AND TUSKEGEE WILL ASSURE MAINTAINING NEEDED BASE PROGRAMS AND PLACING EMPHASIS ON HIGH PRIORITY TARGETED ISSUES.

Base funding (28,000 million) represents the federal commitment to long-term State-Federal partnership with 1890 Institutions and Tuskegee University that provides continuing programs. Failure to move these funds above the previous year's level will constitute an impediment in program opportunity for the benefactors and providers. These funds give 1890 institutions greater capability to respond to changing needs and priorities indicated below.

A. Advance the opportunity for limited resources persons and groups locally, nationally and globally.

B. Provide an educational pathway to learn, develop, make decisions, set goals and develop self-esteem for youth and families who are at risk.

C. Seek ways to work cooperatively with a wide range of universities, governments, businesses, and private sectors organizing to prescribe dynamic experiences for key leaders and clientele.

D. Strengthen staff to a level of expertise who can meet the challenges of societal issues more effectively through training, publications and education while demonstrating alternative methods and options for the resolution or abatement of societal problems.

Special targeted programs for 1890 Colleges and Tuskegee University address very critical and essential needs apparent across the nation. Five million dollars are included in the FY 1994 budget for support of the following programs: **Teen-age Pregnancy and Health (1.5 million); Alternative agriculture/Small-Scale Farmers (1.5 million); Rural Economic Development-Leadership Development (.5 million); and Families with Children/Prenatal to Age Five(1.5 million).**

Many people are unable to find or maintain employment due to a lack of basic education and marketable skills. Training will need to be provided to volunteers, educators, economic development organizations, grass root organizations and groups with the hopes of broadening their efforts to create jobs, increase household income, and improve the quality of life for families at risk.

1890 Institutions and Tuskegee will continue to implement programs to help families and communities develop strategic plans

5

and implement elements of sustainability and leadership development that are necessary to bring a solid proactive individual and community plan to fruition. An example is the jobs readiness programs on skill development and how to establish home-based business.

Communities are encouraged to utilize data from using the reputational, social participation, event, science and technology analysis and positional approaches to solutions of problems to the critical mass.

SUMMARY OF BUDGET REQUEST FOR FY '94

(Thousands of dollars)

1890 Colleges and Universities and Tuskegee University

Base funds	$28,000
Targeted Programs	5,000
TOTAL	$33,000



NASULGC National Association of State Universities and Land-Grant Colleges

TESTIMONY

PRESENTED TO THE

THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U. S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

BOARD ON VETERINARY MEDICINE
OF THE
NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES

BY

DR. JOHN M. BOWEN

DIRECTOR, VETERINARY MEDICAL EXPERIMENT STATION
COLLEGE OF VETERINARY MEDICINE
AT THE
UNIVERSITY OF GEORGIA

MARCH 31, 1993

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NASULGC BOARD ON VETERINARY MEDICINE

I am Dr. John M. Bowen, Director, Veterinary Medical Experiment Station, of the College of Veterinary Medicine, University of Georgia. I am presenting the FY '94 agriculture appropriation recommendations of the Board on Veterinary Medicine which is a member of the Commission on Food, Energy, and Renewable Resources within the National Association of State Universities and Land Grant Colleges (NASULGC). The veterinary colleges and the departments of veterinary science throughout the country join the NASULGC Board on Agriculture in recommending significant increases in FY 1994 appropriations for science and education programs in the U.S. Department of Agriculture. We believe that programs in research, extension, and higher education must be strengthened in order to provide the knowledge which will enable American agriculture to remain strong and provide the American people a safe and wholesome food supply at a reasonable cost.

EXECUTIVE SUMMARY

Veterinary medicine is the biomedical arm of American agriculture and is critical to the protection and improvement of the health of agricultural animals. Food production and maintenance of an adequate food supply system are essential for a stable economy and a healthy society. Specific programs highlighted in this testimony in which veterinary medicine is making or could make major contributions are summarized as follows:

- Base Programs' support for animal health and disease research through Hatch Act and Animal Health (Section 1433) should be increased. The Animal Health (Section 1433) funding has received no increase in **15 years**.
- National Research Initiative Competitive Grants Program:
 Animal Systems - Provides important funding for research on the molecular and cellular biology of disease.
 Natural Resources and the Environment - Veterinary Medicine could make important contributions to this program.
 Nutrition, Food Quality, and Health - Veterinary Medicine could make important contributions to food safety through preharvest research.
- Special Research Grants for National Programs:
 Animal Health and Disease - Effect rapid transfer of basic research information to the production setting.
 Animal Well-being/Welfare - Define animal well-being/welfare in scientific terms and recommend guidelines.
 Minor-use Animal Drugs - Promote clearance of animal drugs and biologics for minor uses and minor species.
 Water Quality - Define impact of water quality on animal health.
- Sustainable Agriculture: Production animal medicine has a critical role in establishing reliable and practical sustainable farming practices.
- Companion Animal Medicine: Companion animals are a major national resource and deserve Federal investment in research to improve their health and well-being.
- Higher Education Programs: The National Needs Graduate Fellowship Program and the Higher Education Challenge Grants Program are critical to providing a continuum of expertise in the agricultural and veterinary medical sciences.

Veterinary Medicine's Role in American Agriculture

Veterinary medicine is the biomedical arm of American agriculture and is important to the protection of America's largest industry and the health of consumers. Veterinary medicine provides new science and technology to support a highly diversified agricultural system that produces safe food and fiber products for the citizens of our country. New opportunities in science and technology illustrated by explosive breakthroughs in modern biology and computer science, bring unparalleled opportunities for progress in agriculture through veterinary medical research.

Base Programs

Hatch Act: FY 1993 Appropriation - $168,785,000
FY 1994 Recommendation - $177,224,000
Animal Health: FY 1993 Appropriation - $5,551,000
FY 1994 Recommendation - $5,828,000

The animal health base program authorizes the distribution of federal funds for Animal Health and Disease Research on a formula basis to colleges of veterinary medicine and state agricultural experiment stations. Formula provisions of Section 1433 are unique in that funds are distributed to the States in relation to a State's livestock importance and its capacity to conduct animal health and disease research. Without these funds, the biomedical component of agriculture is unsupported because many veterinary colleges have no access to Hatch Act funding. The yearly uncertainty of funding in the Executive budget for this program has been a major difficulty in its operation. It has been added each year by Congress. Administrative requirements are similar to the Hatch Act. A one year carry over from date of release of funds should be authorized.

National Research Initiative Competitive Grants Program (NRICGP)

Animal Systems: FY 1993 Appropriation - $25,000,000
FY 1994 Recommendation - $34,000,000

Recent significant advances in molecular and cellular biology of animal diseases are opening up exciting possibilities in animal health research. The objectives of this program include the following:

- Molecular basis of the pathogenesis of disease.
- Manipulation of genetic material of disease-causing agents, animals, and animal cells to determine how host resistance is overcome and how genetic factors are related to immunity.
- Identify and develop rapid detection systems for genes associated with disease resistance.

Natural Resources and The Environment:
FY 1993 Appropriation - $18,000,000
FY 1994 Recommendation - $36,000,000

Veterinary research is needed as part of the cooperative efforts essential to improving environmental quality while providing for the needs of the world's population. We live in a complex era in which a variety of chemicals are generated from industrial, agricultural, pharmaceutical, energy-related, household and other sources. The veterinary profession has many skills and competencies which are needed to address crucial environmental issues. Examples

of ways veterinary medicine can improve environmental quality include:
• Identify, quantify, and assess the impact of chemicals, antimicrobials, and natural toxins in animal tissues and feeds.
• Identify safe and environmentally acceptable opportunities and methods to recycle and dispose of wastes.
• Research the effects of surface and groundwater contamination upon animal health and food products.

Nutrition, Food Quality, and Health:
FY 1993 Appropriation - $6,500,000
FY 1994 Recommendation - $20,000,000

Food Safety: Consumer confidence in the food supply is of major concern to agriculture. There is increasing urgency to prevent the introduction of microbial and chemical hazards into the food chain as well as their detection before problems arise. Preharvest food safety programs are critical because chemical and microbiological hazards enter the food chain in the production unit. The following are important areas for veterinary research:
• Preharvest food safety research to identify the most efficient use of veterinary science and technology in assuring the on-farm production of safe foods of animal origin.
• Identify critical control points where hazards to health can be prevented from entering or be eliminated from foods.
• Develop methodologies to assess health risks during production, processing, and/or distribution of foods and feeds.

Special Research Grants for National Programs

Section 1414.2.c.1, Public Law 89-106, as amended, authorized Special Research Grants in Animal Health for peer reviewed research projects. This program was initiated in 1979 and terminated in 1990 with the view that its mission would be assumed by the NRICGP. This view is incorrect. There is now a critical need to reinstate this program.

Animal Health and Disease: FY 1993 Appropriation - $0.0
FY 1994 Recommendation - $3,000,000

A more rapid transfer of basic research information to the production setting is needed. Thus, a new Special Grant Initiative in Animal Health is proposed. The initiative will focus on adapting basic research discoveries to the production site. This would ensure that the mission-linked component of the NRICGP would be implemented. It is especially important that fundamental research findings of the NRICRP be applied to the resolution of new and emerging disease problems in the production setting. This funding will be managed through issuance of very specific RFA's that would focus on critical animal health and disease areas that <u>are not funded through the NRICRP.</u>

This program would also enable U.S.D.A. to address emerging or reemerging infectious diseases. Such diseases over the last several years include the Porcine Respiratory and Reproductive Syndrome (PRRS); bovine tuberculosis; bovine protozoal abortion (BPA); foot warts in dairy cattle; spiking mortalities of broilers, chicks, and turkey poults; and mystery disease of horses. These diseases cause serious economic losses and affect international trade.

Animal Well-being/Welfare: FY 1993 Appropriation - $0.0
FY 1994 Recommendation - $3,000,000

Veterinary research relating animal well-being to health, behavior, environmental stress, and productivity is needed. Currently, there is not enough basic scientific information available to define what constitutes a state of well-being of food animals to address these issues. Behavioral, physiological, health, and production parameters will all need to be considered. Space requirements must be evaluated in balancing production efficiency, economical goals, and well-being. Veterinary research can effectively define and develop guidelines to optimize the well-being, performance, and productive lifetimes of livestock, poultry, and companion animals. Examples of veterinary research imperatives to assure animal well-being/welfare include:

- Define behavioral and physiological characteristics affected by stress in animal production and care units.
- Develop benefit-cost ratios for potential management, nutritional, environmental, and other changes implemented to improve animal health and well-being.
- Understand and control stress in production animals through improvements in management systems.

Minor-use Animal Drugs: FY 1993 Appropriation - $464,000
FY 1994 Recommendation - $520,000

Interregional Project #4 (IR-4) has been very effective in obtaining clearances on minor-use animal drugs. Research programs to develop safe animal drugs and biologics for minor uses and minor species are prime examples of federal interagency cooperation with academic institutions, pharmaceutical industries, and commodity interests to effectively meet a need based more upon compassion for animal well-being than upon an expectation of major economic returns. Current funding does not permit rapid response to the steadily growing needs of industries such as aquaculture, gamebreeders, commercial pet suppliers, sheep, goats, and certain other segments of the livestock and poultry industries, e.g., ostriches, emus and rheas.

Water Quality: FY 1993 Appropriation - $8,950,000
FY 1994 Recommendation - $10,080,000

The water quality special research grants program for FY 1993 and prior years has excluded the impact of water quality on animal health and the quality of food products derived from animals. This program emphasizes risk and remediation, both of which require assessment of health hazards to animals and people. Examples of how veterinary research could relate water quality and animal and human health are as follows:

- Develop better methods for detecting and quantifying natural or environmental contaminants and their metabolites in water and animal tissues.
- Define and assess the effects of chemical toxicants and microbes on animal health, reproduction, well-being, productivity, and food safety.
- Determine the impact of current animal agricultural management systems on groundwater and environmental pollution.

Other Research Programs

Sustainable Agriculture:
FY 1993 Appropriation - $6,725,000
FY 1994 Recommendation - $10,000,000

The goal of the Sustainable Agriculture Research and Education (SARE) is

to support research and education projects that are designed to provide farmers and others with reliable, practical information on sustainable farming practices. The legislation mandates research to increase the knowledge of agricultural production systems that are profitable, competitive, compatible with the environment, and safe. Proposals from veterinary medicine have not been funded by the SARE Program, yet an integrated approach to maintenance of health in food-producing animals offers exceptional opportunities for increasing the safety, quality, and profitability of food animal products. Examples of veterinary research imperatives to enhance production animal management:

- Develop management systems, breeding programs, and immunological interventions that will enhance neonatal immunological protection against diseases.
- Develop and implement more sensitive and efficient methods to detect causes of production losses and inefficiencies.
- Identify critical control points in order to design strategies to assure disease-free animal-based foods of high quality.

Specified Programs: Companion Animal Health:
FY 1993 Appropriation - $0.0
FY 1994 Recommendation - $8,600,000
(0.1% of pet food sales)
(Board on Veterinary Medicine)

Progress toward improving the health of companion animals continues to be impeded by very limited availability of funding specifically for research of direct benefit to companion animal health and well-being. This situation is made especially critical by the lack of any Federal funding targeted for companion animal health research. Research progress on parvovirus disease and brucellosis in dogs and leukemia in cats has important implications for better understanding of similar diseases in swine and cattle. Pet owners represent a significant taxpayer base and their expenditures for pet foods represent a major investment in the United States economy, i.e., about $8.6 billion annually, an amount that is of definite benefit to U.S. agriculture. Over 108 million dogs and cats are found within 52% of U.S. households.

Higher Education Programs

National Needs Graduate Fellowship Program:
FY 1993 Appropriation - $3,500,000
FY 1994 Recommendation - $4,500,000

This program has become a key mechanism for recapturing excellence in food and agricultural sciences graduate education. It serves both to recruit and train academically outstanding graduate students and to strengthen the quality of graduate programs and faculty. It is a major force in developing excellence in the food and agricultural scientific and professional work force.

Higher Education Challenge Grants Program:
FY 1993 Appropriation - $1,500,000
FY 1994 Recommendation - $5,000,000

This program meets several critical needs of U.S. colleges and universities in their efforts to produce world-class scientists and other professionals. It requires dollar-for-dollar matching support, thereby doubling the Federal investment and establishing several exciting partnership ventures. Since the program was launched in FY 1990 less than 18 percent of the excellent proposals generated in this highly competitive process could be funded.



NASULGC National Association of State Universities and Land-Grant Colleges

April 16, 1993

The Honorable Richard J. Durbin
129 Cannon House Office Building
U.S. House of Representatives
Washington, DC 20515

Dear Representative Durbin:

I am writing this letter in regards to funding for higher education in the U.S. Department of Agriculture (USDA) budget. As you are aware the Office for Higher Educations Programs located in the Cooperative State Research Service (CSRS) of the USDA is responsible for several small grant programs that act as catalysts or seed money to stimulate colleges and universities to change, innovate and improve undergraduate and graduate education. These relatively small programs have proven to be extremely effective. My specific interest today resides in the area of the Institutional Challenge Grants Program ($1.5 million). This modest program is critical to the nation's colleges of agriculture.

As the Director for Academic Programs, Agriculture and Natural Resources for the National Association of State Universities and Land-Grant Colleges (NASULGC) and as a co-worker with the American Association of State Colleges of Agriculture and Renewable Resources (AASCCARR) I can confidently speak for practically all the colleges of agriculture and natural resources in the nation. Both organizations have publicly stated that this grant program is their top priority for federal funding in the area of Higher Education.

The reason this rather modest program is so important is because it meets the needs of the nation at this critical juncture in our history. Let me succinctly illustrate how "in tune" this program is with the prevailing concerns of the legislative and executive branches of our government. Federal interest in higher education has been heightened because of the realization that educated and trained human capital is a critical national resource and thus a key federal responsibility. The recent report issued by the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET) clearly stated its concern with this issue: "**Federal agencies should examine the impact of federal research support on university undergraduate and graduate education and identify strategies to ensure against unintentional degradation of the educational mission and excellence of the research-intensive universities.**"

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The President's Council of Advisors on Science and Technology (PCAST) raised the same concerns: "**The federal agencies should ensure that their programs encourage universities to reemphasize education rather than discourage them, even inadvertently.**"

Last year, testimony before the subcommittee of the House Science, Space and Technology Committee reiterated this concern: "**if federal agencies follow the lead of the NSF and broaden the base of funding for universities to embrace the full range of scholarly activity, an important concomitant will be increased attention to teaching and the integration and application of knowledge.**"

The Institution Challenge Grant Program is a perfect example of the type of effort these councils and committee have recommended for improvement of our American academic system. Individual projects supported by this program focus on curricula design and materials development, faculty preparation and enhancement, instruction delivery systems, and student experiential learning. The funds are always directed toward targeted national problems. All grants are competitive and require matching funds; thus they promote university partnerships with industry and among other colleges and universities, and stimulate non-Federal support for higher education.

For a specific example of the validity of this program we need go no further than Illinois. Through the efforts of the University of Northern Illinois and the University of Illinois, higher education in the state has received seven grants over the three year life of this program. (list attached) This is an enviable record for Illinois when one realizes that because of limited funds only about 20 grants a year can be awarded. The approximately 130 colleges of agriculture and natural resources annually submit almost 200 proposals for consideration for funding from this program. Many excellent projects go unfunded.

Therefore on behalf of the National Association of State Universities and Land Grant Colleges and the American Association of State Colleges of Agriculture and Renewable Resources, I would like to encourage you to support increased funding for this program. By increasing the present $1.5 million appropriation by $2.5 million to a total of $4 million we could award approximately of sixty grants a year to deserving colleges and universities, all of which would be competitive and require matching non-Federal money. This modest sum for higher education would serve as a critical catalyst to leverage much larger quantities of state funds to improve our higher education system.

If at all possible, I would like to follow up on this issue with your appropriate staff member to discuss this and other grant programs in Higher Education at the USDA. They also warrant your strong consideration. Not the least of these is the Minorities Scholars Program which has been

requested for the first time in a presidential budget. Minority representation in the agriculture industry is abysmal. This program along with companion programs in this area can only help alleviate this national problem.

Thank you for your time and consideration of this issue.

Sincerely,

Joe Kunsman
Director, Academic Programs
Agriculture & Natural Resources
NASULGC

JK/mfs
Enclosure

ILLINOIS GRANTS

FY 1990

Enhancing Managerial Education to Attract Young People To Agribusiness - Steven T. Sonka, University of Illinois - Collaboration between faculty in Bus. & Ag. & the private sector. Includes courses, practicum & learning materials.

Summer Research Program for Minority Undergraduate Students - William E. George, University of Illinois - A research and faculty mentoring program on the U of I campus for minority undergraduate students from the U of I and selected 1890 land-grant institutions.

FY 1991

Faculty Development in Food Systems Management: Identifying Needs and Matching Resources - Ellen S. Parham, Northern Illinois University - Faculty Preparation and Enhancement for Teaching. Develop faculty by identifying areas of need, determining resources and designing a model process. To meet demand for advanced degrees and provide experiences to teach and conduct research in food service management.

A Collaborative Approach to Enhancing Agribusiness Management Education - Michael A. Mazzocco, University of Illinois, Urbana-Champaign - Curricula Design and Materials Development, Faculty Preparation and Enhancement for Teaching, and Student Experiential Learning. Enhance the managerial capacity of the Nation's food and agribusiness sector. Implementation of the Food and Agribusiness Management curriculum developed under previous grant. Includes a mentoring program for students by industry personnel.

Summer Research Program for Minority Undergraduate Students - William L. George, University of Illinois, Urbana-Champaign - Student Experiential Learning. A research and faculty mentoring program for minority undergraduate students. Collaborating with Alabama A&M Univ., Fort Valley State Univ., Univ. of Maryland-Eastern Shore, Southern Univ., and Tuskegee Univ.

FY 1992

Production of Lifelike, Full Size, Flexible Teaching Models of Food Animals - Gerald J. Pijanowski, University of Illinois - Curriculum Design and Materials Development. The focus of this project is to produce a full size, anatomically correct, realistic teaching model of the bovine pelvis including bones, muscles, blood vessels, nerves and organs of the digestive and urogenital systems in the pelvic canal. The model will be made from pliable polymers that accurately simulate the look and feel of live tissue. It will be used for teaching basic anatomy, rectal examinations, and gynecological and obstetrical procedures (such as the procedures involved in artificial insemination and embryo transfer) without risk of injury to a live animal.

Educating Students to Function in Their Future and to Adapt to Change - William L. George, University of Illinois - Curriculum Design and Materials Development and Faculty Preparation and Enhancement for Teaching. Objectives include: (1) to continue development and implementation of a Freshman Discovery Program emphasizing contemporary issues and holistic systems approaches to problem solving, and (2) to continue development and implementation of a Capstone Learning Experiences Program consisting of a range of learning opportunities for upper level undergraduate students. The plan of operation focuses around faculty and administrators who are committed to improving undergraduate education.

67-181 O—93——15

FORESTRY RESEARCH TEACHING AND EXTENSION PROGRAMS

WITNESSES

ALAN R. EK, HEAD, DEPARTMENT OF FOREST RESOURCES, UNIVERSITY OF MINNESOTA

WARREN S. THOMPSON, DEAN, SCHOOL OF FOREST RESOURCES, MISSISSIPPI STATE UNIVERSITY, REPRESENTING THE NATIONAL ASSOCIATION OF PROFESSIONAL FORESTRY SCHOOLS AND COLLEGES

Mr. SKEEN. Dr. Thompson, Dr. Ek and Dr. Haines.

We have more talent than we know what to do with today.

Mr. EK. We wish we had more, sir.

Mr. SKEEN. We thank you.

Mr. EK. Mr. Chairman, I am Alan Ek. I am Head of the Department of Forest Resources at the University of Minnesota. With me on my left is Dr. Warren Thompson, Dean of the School of Forest Resources at Mississippi State University. And to his left is Wayne Haines with the American Forestry and Paper Association.

I would start with testimony on behalf of Dr. Thompson and myself for the National Association of Professional Forestry Schools and Colleges, NAPFSC. It is an organization representing over 60 universities that conduct the nation's research and teaching and extension programs in forestry and related natural resource areas.

The history, culture and economic development of this country is closely tied to our forests. It is a source of fuel, shelter, food. Our dependence upon products of the forest during the early years of our history was almost total.

Today, these same forest lands have been regenerated several times. They provide the raw materials for products which are of fundamental importance to us in our daily lives. The manufacture of lumber, plywood, paper and a host of other products is one of the few industrial enterprises in which the U.S. still has a real competitive advantage.

Recognition that our forests influence our lives in other than material ways has resulted in unprecedented public interest in protecting them. Tropical deforestation, global warming, wetlands and biodiversity have become critical issues and the focus of new legislation and regulatory measures.

Clearly forest management needs to follow an ecosystem approach, one that is well grounded in scientific understanding, and that approach must be supported by knowledge of human/forest interactions.

Because the legislation or other decisions on forest resource allocation or use can have very far reaching consequences, it is imperative that they be based upon sound information that permits a rational evaluation of the very often complex tradeoffs.

For example, legislation which mandates the removal of large acreages of federal forest lands from production is predicted to create an artificial shortage of timber, demands on private timberlands that simply cannot be met in the short term. The result is price increases for lumber and other building materials of magni-

tude that will affect the housing industry and the affordability of housing.

Alternatively, preservation or utilization policies can have very important long-term effects on biodiversity and ecosystem health across landscapes which we are really just beginning to understand well.

Regrettably the science needed to support this sound management and regulation is either not available or woefully inadequate. As a nation we have not invested in forestry research to the extent necessary to provide the information which now is an urgent need.

That brings me to the main purpose of this testimony which is to request your help in meeting this need by supporting three items in the 1994 federal budget.

The first of these is the Cooperative Forestry Research Program sometimes referred to as the McIntire–Stennis Program. This program has been an unqualified success. The appropriation is leveraged by a factor of at least five in most states. The funds provide base support for research programs at universities which address the information needs which we find now to be so critical, especially on non-federal lands. Additionally, they are used to train graduate students who will become the natural resource scientists of the future.

We respectfully request at least $25 million for the Cooperative Forestry Research Program.

We also request your support of the National Research Initiative Competitive Grants Program at approximately $162 million. This appropriation will support the basic research in forestry and agriculture that will in time provide the foundation for future economic and ecological gains.

Finally, we ask your consideration of at least $3 million as an appropriation for the Renewable Resources Extension Act. These funds support a small but important extension effort and certainly one that will have to become much larger, one designed to make available to user groups the results of forestry research.

We thank you for your support and for the opportunity to present this testimony.

Mr. SKEEN. Thank you, Doctor.

[Dr. Ek's and Dr. Thompson's prepared statements follow:]

Research
Education
Extension
International

TESTIMONY

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

OF THE

COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

ON BEHALF OF THE

NATIONAL ASSOCIATION OF PROFESSIONAL FORESTRY SCHOOLS AND COLLEGES

BY

DR. ALAN R. EK
RESEARCH CHAIR, NAPFSC
AND
HEAD, DEPARTMENT OF FOREST RESOURCES
AT THE UNIVERSITY OF MINNESOTA

AND

DR. WARREN S. THOMPSON
PRESIDENT, NAPFSC
AND
DEAN, SCHOOL OF FOREST RESOURCES
AT MISSISSIPPI STATE UNIVERSITY

March 31, 1993

CAMERA

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STATEMENT BY THE NATIONAL ASSOCIATION OF PROFESSIONAL FORESTRY SCHOOLS AND COLLEGES

I am Alan Ek, head of the Department of Forest Resources at the University of Minnesota. With me is Dr. Warren S. Thompson, dean of the School of Forest Resources at Mississippi State University. This statement is presented in our capacity as research chair and president, respectively, of the National Association of Professional Forestry Schools and Colleges (NAPFSC).

Our organization represents the 62 universities that conduct the nation's research, teaching and extension programs in forestry and related natural resource areas. We appreciate this opportunity to comment on three programs administered by the U.S. Department of Agriculture which undergird the educational and research efforts at these 62 institutions. They are the McIntire-Stennis Cooperative Forestry Research Program, the National Research Initiative, and programs conducted under the Renewable Resources Extension Act.

Funding appropriated by Congress for the Cooperative Forestry Research Program has been a critical part of the support for university-based research and vital to the training of future scientists and educators for more than 25 years. These funds have been wisely used. Each dollar in federal appropriations has been leveraged by a factor of five to six in nonfederal dollars in support of research programs having both regional and national significance.

Collectively, these programs have been an unqualified success. They have improved the understanding of i) the biology of forest organisms, ii) the structure and function of forest ecosystems, iii) human-forest interactions, iv) wood as a raw material and v) international trade, competition and cooperation. These university-based programs have made solid advances in extending our knowledge of the forest ecosystem and of the basic chemical, physical and biological forces which influence forest productivity. At the same time they have extended the market horizons for environmentally friendly and renewable wood based products. Further, this effort provided a better understanding of forest management systems appropriate for multiple-use of forest lands for timber, water, wildlife and recreation.

Notwithstanding the gains that have been made in developing research information needed to maintain the health, productivity and diversity of our forest resource, much remains to be done. In fact, the research community, in common with the administration and members of Congress, are caught up in the growing public concern over ancient forests, threatened and endangered species, global warming, wetlands, wilderness preservation, tropical deforestation, and related environmental issues.

In my own state, Minnesota, we are attempting to complete a generic environmental impact statement assessing the long range and cumulative effects of timber harvesting on the state's forests and impacts on water, wildlife, recreation, aesthetics, economics and the sustainability of resource supply. This is but one of many states that are seeking information to plan their future. These studies in themselves, however, show many of the same information inadequacies evident with federal lands.

Regrettably, the science to which resource management and national, state and local policy measures can be anchored is simply inadequate. The urgent need for research on environmental issues related to forest lands is most apparent at the state and local levels. Management of land for timber, water, wildlife and recreation is becoming increasingly more difficult and expensive for lack of reliable information on the best management and harvesting practices on a site specific, landscape and regional basis. It is noteworthy that environmental research was ranked first among research needs—above timber production—by the Southern Industrial Forestry Research Council, an organization representing the major forest-based industries in the South.

Our request for your continued support of university-based forest research is closely tied to the increasing importance of the forest resource to the economic and social well being of our citizens. The growing and processing of timber provides the economic underpinning for literally thousands of communities in all regions of the country. In my own state of Minnesota, the forest products industry is the second largest industry and a major area of industrial expansion. In Mississippi, thirty-eight percent of all manufacturing firms are in the forestry sector. Collectively, these firms account for approximately one-fourth of all manufacturing employment, payrolls and value added and for almost half of all capital expenditures for manufacturing facilities.

There is convincing evidence that forest products will become even more important in the future. Global demand for forest products is increasing. This increase in demand coincides with diminished wood supplies in many established wood-producing countries of the world. The United States is well positioned in terms of timber supply and manufacturing and transportation infrastructure to satisfy a major share of this increase in demand. However, continued profitability of forest-based industries will require that we develop more efficient and environmentally softer production and processing systems if we are to compete in a growing international market where foreign competition is also increasing.

The economic characterization of the forest resource must also recognize the very significant degree to which our forests provide the setting for outdoor recreation and the considerable economic impact associated with that. In many areas, tourism and the forest products industry coexist very effectively and together make for very viable communities.

There is also convincing evidence that forests, by virtue of their structure and biodiversity, will become even more important as wildlife habitat and to maintain the gene pool for a wide range of plants and animals. Especially important to maintaining biodiversity will be the spatial linkage that we provide between forest communities across the landscape.

As a challenge, it is clear that the problems we are facing are more complex than any issue previously dealt with by mankind--we will not be able to provide needed goods, services and values the people require AND sustain our ecosystems if we do not improve our understanding of how those systems function, both now and under some desired future condition.

President Clinton, in his recent statement "Vision of Change for America," recognized the importance of a stronger forest resources research program. That fits well with the recent National Research Council study on forestry research authorized by the National Academy of Sciences. The study report entitled "Forestry research: A mandate for change," recommended a significant strengthening of forestry research. Subsequently a study implementation committee and plan was developed. Since then we have been working closely with the implementation

committee, USDA Forest Service Research, state foresters, forest industry, professional societies and interest groups to develop a cooperative research initiative focusing on **forest ecosystem management**.

This initiative would recognize the scientific basis for ecosystem management requires a combination of (1) basic long-term inquiry; (2) issue-focused, problem solving interdisciplinary research and development; (3) scientific support to ongoing management of lands and resources, such as through ecological classifications, inventories, ecological analyses and monitoring and evaluation; and (4) integrating science into the policy-making process. From the standpoint of a university role, we see this as especially important to state and regional concerns as pressures on federal lands are shifted to other ownerships.

As part of the coordination in this initiative, university funding would be largely directed to the problems of state, local and private ownerships. In particular, the large non industrial private forest landownership (NIPF) nationally would be targeted as one that will have to carry a larger share of the burden for timber production and where considerable improvement in management is both desirable and possible for a wide range of forest values.

This application of science to ecosystem management also calls for a systematic extension process to (1) provide continuing education for natural resource professionals; (2) enable landowners/managers to adapt and utilize research results; (3) assure basic understanding by public decision-makers, and (4) reach the general public with education to guide their individual and collective efforts.

University-based forest research is an important part of the collaborative research effort involving federal, state and industry scientists and resources. Schools and colleges of forestry have the expertise in house to address a broad range of problems and opportunities related to the forest resource. Because of their university affiliation, they can conduct research on problems that require scientists from many disciplines. This is important in the context of increasing public concern about the environment and the need to maintain healthy, productive forests to meet the increasing demand for both consumptive and nonconsumptive uses of the forest resource. It is for these reasons that we respectively request your support in securing an appropriation of at least $25 million for the Cooperative Forestry Research Program.

We also request your consideration of a funding level of $162 million for the Competitive Grants Program administered under the National Research Initiative of the USDA. This program is increasingly important to natural resource scientists. It emphasizes high priority, basic and applied research needed to expand our knowledge base and to provide the foundation for future economic and social benefits. Funds from the National Research Initiative enable forestry schools and colleges to build upon the base provided by the Cooperative Forestry Research Program.

Finally, we request your continuing support for programs administered under the Renewable Resources Extension Act. Appropriations made available under this Act help make possible the timely dissemination of research results derived from the Cooperative Forestry Research Program and the National Research Initiative. Activities supported by these funds are an integral part of the outstanding programs conducted by the Cooperative Extension Service in each state. We respectfully recommend an appropriation of at least $3 million for the Renewable Resources Extension Act.

We are aware that our request for increases in funding for forestry research are being made at a time when Congress must deal with budget shortfalls. However, we believe that the number and complexity of the economic, social and environmental issues associated with the forest resources of the United States provides strong justification for increased funding. This position is supported by the "Forestry research: A mandate for change," in its recommendation that funding for the Cooperative Forestry Research Program be increased over a period of five years to its authorized level of fifty percent of the USDA Forest Service research budget. Currently, support for this program is only fifteen percent of the Forest Service research budget. Increased funding is also supported by the President's "Vision for America" proposal in which forestry research is noted as an important investment strategy for the nation.

In summary, we urge your support of the Cooperative Forestry Research Program at or above $25 million; the National Research Initiative at $162 million; and the Renewable Resources Extension Act at $3 million or higher.

Thank you for this opportunity to present this statement.

FORESTRY RESEARCH AND EDUCATION INITIATIVE

WITNESS

L. WAYNE HAINES, MANAGER, FOREST PRODUCTIVITY AND RESEARCH, INTERNATIONAL PAPER, REPRESENTING AMERICAN FORESTER AND PAPER ASSOCIATION

Mr. HAINES. Good afternoon, Congressman.

My name is Wayne Haines. I am the Manager of Forest Productivity and Research for International Paper. I am here today speaking on behalf of my company and as chairman of the Resources Research Committee of the American Forest and Paper Association.

I appreciate the opportunity to present the Research Committee's recommendations for the McIntire-Stennis Cooperative Forestry Research Act, which has just been discussed, for the National Research Initiative and for the Renewable Resources Extension Act.

I am going to give a you a short version and I hope that you will include the entire testimony for the record.

Mr. SKEEN. It will be so entered.

Mr. HAINES. Thank you.

The American Forest and Paper Association is a new program. It is the result of bringing together what was known as the American Forest Council and NFPA and it is the intent of the association to be more effective in communicating with our colleagues the importance of the American forest and the paper manufacturers' programs.

The American Forest and Paper Association is the national forest industry trade association representing the forest land managers, solid wood producers and pulp and paper manufacturers in the United States. With about 1.4 million employees, annual sales of $190 billion and 7 percent of the gross national product, the forest products industry is a significant contributor to the nation's economic strength, quality of life and protection of the environment.

For purposes of my testimony today, I will highlight the results of the forest industry's just completed research priorities report and express strong support for the administration's Forestry Research and Education Initiative that resulted from a National Academy of Sciences report entitled "Forestry Research: Mandate for Change."

The American Forest and Paper Association believes that forestry research is severely underfunded given the economic and environmental importance of the nation's forest resources.

Major investments in forestry research will be needed in order for the forest products industry to remain competitive on a global scale while at the same time conserving and protecting the many functions and values of the forest resources of this country.

I am sure you are aware of the major national resource conflicts around the country, including the spotted owl in the Pacific Northwest and wetlands in the south. Research into these public policy issues must be conducted and answers found or we risk continued gridlock because of inadequate information on how to manage resources in a compatible manner.

A major finding of the American Forestry and Paper Association's research report is that the top research priorities are remarkably consistent from one region of the country to the other. Four of the highest priority research areas include forest management, environmental and social biological interactions, silviculture and wood utilization.

Other recommendations from the National Research Priorities Report focuses on improving coordination of the forestry research through a national research advisory council establishing centers of emphasis, providing new funding for the most pressing forestry policy issues, maintaining long-term basic research and improving the transfer of new research information to those who make management decisions.

I commend this report to your attention and ask that it be incorporated into the hearing record.

Mr. SKEEN. That will be done.

Mr. HAINES. Thank you.

The American Forest and Paper Association supports the administration's Forestry Research and Education Initiative resulting from the recommendations of the National Academy of Science report entitled "Forestry Research: Mandate for Change." Although the full program recommended by the National Academy report is critically needed, the realities of current budget limitations require that it be implemented in stages.

The first steps should be to make investments in research and education to address the most pressing forestry and natural resources issues mentioned above and to support current and future resource management programs.

The initiative focuses on addressing the questions of ecosystem management involving how to integrate the production of wood products with environmental protection as mandated by various environmental laws and regulations. Ecosystem management integrates ecological, economic and social factors to meet human needs through diverse, healthy, productive and sustainable ecosystems.

The American Forest and Paper Association has been working closely with other members of the forestry community, including the nation's forestry schools and colleges as represented here, the Society of American Foresters, the National Association of State Foresters, U.S. Forest Service, Cooperative Extension Service, CSRS, and members of the conservation community. It is significant that all players in forestry research are supportive of the Forestry Research and Education Initiative.

One particular area of emphasis within the initiative would be the long-term productivity and sustainability of intensively managed forests. As even more land is withdrawn from timber production, the remaining productive acres will need to produce more and better quality timber. Short rotation intensive forestry for wood fiber for biomass fuel similar to row crop agriculture must factor in genetic tree improvement, control of competing vegetation, soil amendments such as fertilizer as part of sustainable forest management.

The American Forest and Paper Association also recommends funding for a special grant in fiscal year 1994 to up date the 1976 report by the Committee of Renewable Resources for Industrial

Materials. This report is referred to as CORRIM. The special grant would be administered by the Cooperative State Research Service (CSRS) of the United States Department of Agriculture.

The steering committee for this CORRIM II brings together the best scientists to conduct an updated cradle-to-grave analysis of environmental impacts associated with the growth and use of the nation's renewable forest resources. The study will address the impact of forest management on reducing carbon dioxide emissions, carbon storage in the forest and its products, the energy intensity of wood and its competing materials, alternate construction systems and the product waste streams. This information will contribute to better construction and architectural standards and better forest management.

In conclusion, funding levels proposed by the Forestry Research Committee for the next five years are outlined in the Forestry Community Initiative Report which we offer for inclusion in the hearing record.

For fiscal year 1994, the American Forest and Paper Association supports total investments of $32 million for McIntire-Stennis forestry research, $150 million for forestry competitive grants as part of the National Research Initiative, and $5 million for Renewable Resources Extension. For all three above programs, the additional investment in fiscal year 1994 would total $23.2 million consistent with the Forestry Research and Education Initiative.

Congressmen, I appreciate the opportunity to bring this report to you and will be glad to respond to any questions.

Mr. SKEEN. Thank you, Dr. Haines.

Dr. Thompson, do you——

Mr. THOMPSON. No, I am just with these gentlemen, sir.

Mr. SKEEN. Well, you are well accompanied.

Mr. THOMPSON. Thank you.

Mr. SKEEN. You mentioned a very critical problem we have with the forestry situation in the United States today. There is no question about it and you folks are the ones that are going to have to come up and help us find some answer to this problem. I appreciate the fact that your testimony indicates that it can be done.

Dr. HAINES. Yes, sir. It can be and we look forward to working with you on it.

Mr. SKEEN. Well, we look forward to working with you and we thank you for your testimony and thank you for being here today.

[Mr. Haines' prepared statement follows:]

STATEMENT FOR THE RECORD

OF THE

AMERICAN FOREST & PAPER ASSOCIATION

BEFORE THE

AGRICULTURE, RURAL DEVELOPMENT,

AND

RELATED AGENCIES SUBCOMMITTEE

HOUSE APPROPRIATIONS COMMITTEE

UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 31, 1993

Good afternoon. My name is Dr. Wayne Haines. I am the Manager of Forest Productivity and Research for International Paper. I am here today speaking on behalf of my company and as Chairman of the Resources Research Committee of the American Forest and Paper Association (AFPA). I appreciate the opportunity to present the Research Committees recommendations for the McIntire-Stennis Cooperative Forestry Research Act, the National Research Initiative (NRI), and the Renewable Resources Extension Act (RREA).

AFPA is the national forest industry trade association representing the forest land managers, solid wood producers, and pulp and paper manufacturers in the United States. With about 1.4 million employees, annual sales of $190 billion, and seven (7) percent of gross national product, the forest products industry is a significant contributor to the nation's economic strength, quality of life, and protection of the environment.

For purposes of my testimony today, I will highlight the results of the forest industry's just completed Research Priorities Report and express strong support for the Administration's Forestry Research and Education Initiative that resulted from the National Academy of Sciences Report: "Forestry Research, Mandate for Change."

I. Forest Industry's Suggested Research Priorities

AFPA believes that forestry research is severely under-funded given the economic and environmental importance of the nation's forest resources. Major investments in forestry research will be needed in order for the forest products industry to remain competitive on a global scale while at the same time conserving and protecting the many functions and values of the forest resources of this country. I am sure that you are aware of the major natural resource conflicts around the country, including the spotted owl in the Pacific Northwest and wetlands in the South. Research into these public policy issues must be conducted and answers found or we risk continued gridlock because of inadequate information on how to manage resources in a compatible manner.

A major finding of the AFPA's Research Report is that the top research priorities are remarkably consistent from one region of the country to the other. Four of the highest priority research areas include forest management, environmental & social\ biological interactions, silviculture, and wood utilization. Other recommendations from the National Research Priorities report focus on improving coordination of forestry research through a National Research Advisory Council, establishing Centers of Emphasis, providing new funding for the most pressing forest policy issues, maintaining long term basic research, and improving the transfer of new research information to those who make management decisions. I commend this report to your attention and would ask that it be incorporated into the hearing record.

II. Forestry Research and Education Initiative

AFPA supports the Administration's Forestry Research and Education Initiative resulting from the recommendations of the National Academy of Sciences Report: Forestry Research, Mandate for Change." Although the full program recommended by the National Academy report is critically needed, the realities of current budget limitations require that it be implemented in stages. The first step should be to make investments in research and education to address the most pressing forestry and natural resources issues mentioned above and to support current and future resource management programs.

The initiative focuses on addressing the questions of ecosystem management involving how to integrate the production of wood products with environmental protection, as mandated by various environmental laws and regulations. Ecosystem management integrates ecological, economic, and social factors to meet human needs through diverse, healthy, productive, and sustainable ecosystems. AFPA has been coordinating closely with the other members of the forestry community including the nation's forestry schools and colleges, the Society of American Foresters, the National Association of State Foresters, U.S. Forest Service, Cooperative Extension Service, CSRS, and members of the conservation community. It is significant that all the players in forestry research are supportive of the Forestry Research and Education Initiative.

One particular area of emphasis within the initiative should be the long-term productivity and sustainability of intensively managed forests. As even more land is withdrawn from timber production, the remaining productive acres will need to produce more and better quality timber. Short rotation intensive forestry for wood fiber or biomass fuel, similar to row crop agriculture, must factor in genetic tree improvement, control of competing vegetation, and soil amendments such as fertilizers as part of sustainable forest management.

Funding levels proposed by the forestry research community for the next five years are outlined in the Forestry Community Initiative Report which we offer for inclusion in the hearing record. AFPA supports total investments of $32 million for McIntire-Stennis Cooperative Forestry Research, $150 million for Forestry Competitive Grants as part of the National Research Initiative (NRI), and $5 million for Renewable Resources Extension. For all three above programs, the additional investment in FY 94 would total $23.2 million, consistent with the Forestry Research and Education Initiative. .

III. AFPA Supports Adequate Funding for the McIntire-Stennis Act.

McIntire-Stennis Cooperative Forestry Research Act funds promote a broad range of critical forestry research in areas such as: (1) expanding domestic and foreign markets for forest products; and (2) increasing timber productivity while maintaining the associated water, wildlife, recreation, and range resources. These funds also support graduate programs which produce future forestry researchers and teachers. Moreover, these McIntire-Stennis funds leverage additional funding at the rate of more than four-times the McIntire-Stennis investment.

IV. AFPA Supports Forestry Competitive Grants as Part of the National Initiative for Research on Agriculture, Food, and the Environment.

AFPA has joined many others in the forestry community, including the National Association of Professional Forestry Schools and Colleges, in a consensus position which: (1) supports increasing funding levels for the National Initiative for Research on Agriculture, Food, and the Environment; and (2) recommends that at least 20% of the funding be targeted for forestry research.

Investments in forest research in the South averaged only about 6 cents per acre per year. This low level of investment means that many important forestry research needs remain unfunded. The National Research Initiative is essential to fulfill the critical need for funding of new innovative basic research. The Program will attract research proposals from the best scientists in both traditional and non-traditional disciplines. The National Research Initiative will enable forestry scientists to fully capitalize on the base programs funded through other sources.

The forest products industry is of critical importance to the economy of the South and the nation as a whole. Past forestry research has contributed to forest products generating an annual value of over $6 billion. This amount was twice the value of soybeans or cotton crops harvested throughout the south in 1984 and three times the value of tobacco, wheat, or corn crops. Compared with all manufacturing in the South, forest industries employed one out of every nine workers and paid $1 out of every $10 in wages and salaries.

V. AFPA Supports the Renewable Resources Extension Act (RREA)

AFPA strongly believes that extension and technology transfer of research information is the keystone to ensuring that important new information is communicated to those best able to apply and benefit from research expenditures. The forestry component of the Extension Service is inadequate and not able to respond to increasing demands on all resource outputs from private forest lands. This important element must receive increasing attention if the goals Congress articulated in the 1990 Farm Bill are to be realized.

AFPA is currently working with the Extension Service to increase attention in three specific areas including: (1) training of loggers and landowners in state-of-the-art forest management practices to ensure the protection of water quality, (2) educating the public about the compatibility of forestry with environmental values, and (3) forest policy education for decision makers and opinion leaders.

VI. AFPA Continues to Support a Special Grant for the Preparation of the CORRIM II Report.

AFPA recommends funding for a Special Grant in Fiscal Year 1994 to update the 1976 report by the Committee for Renewable Resources for Industrial Materials (CORRIM). The special grant would be administered by the Cooperative State Research Service (CSRS) of the U.S. Department of Agriculture.

The Steering Committee for CORRIM II brings together the best scientists to conduct an updated cradle-to-grave analysis of environmental impacts associated with the growth and use of the nation's renewable forest resource. The study will address the impact of forest management on reducing CO2 emissions; carbon storage in the forest and in products; the energy intensity of wood and its competing materials; alternative construction systems; and product waste streams. This information will contribute to better construction and architectural standards and better forest management. Improved environmental protection and energy saving policies with less negative economic impacts will also be identified.

III. Summary.

The American Forest & Paper Association (AFPA) supports the Administration's Forestry Research and Education Initiative over the next five years. Additional investments including the initiative in FY 94 would amount to $32 million for the McIntire-Stennis Act, $150 million for Forestry Competitive Grants, and $5 million for Renewable Resources Extension. The total increased investment for the above programs amounts to $23.2 million for FY 94.

AFPA also request a special grant for the CORRIM II study that would address the environmental advantages of using wood as a raw material.

Thank you again for the opportunity to present this testimony on behalf of the American Forest & Paper Association's Forest Resources Research Committee. I would be pleased to respond to any questions that you might have.

October 6, 1992

LEGACY FOR THE FUTURE:
An Ecosystem Management Research and Education Initiative

Introduction

Major strides have been made in providing the scientific underpinning for human health. As a result, people all over the world have the potential to live longer, healthier lives. It is now time to pay the same attention to the health of our Nation's and the world's forest resources. Concern about, and interest in, forests and their role has never been greater. But, the existing state of knowledge is simply inadequate to develop sound forest-related policies that will both provide resources to meet ever increasing demands for a growing population and sustain ecosystems.

In a 1990 report entitled "Forestry Research: A Mandate for Change," the National Research Council of the National Academy of Sciences identified the following six issues that exemplify the problem:

- How forests and climate affect each other, especially in the face of rapid global deforestation and forest degradation;
- Loss of biological diversity;
- Growing demand for wood, wood fiber, and derivative chemical products;
- Increasing demand for the preservation of "pristine" forested areas;
- Sustainable wood production integrated with protection of fish, wildlife, water, recreation, and aesthetic values; and
- Maintenance of the health of forests nationally and globally.

The need for a strong, credible and *significant* research and education initiative in natural resources and forestry is underscored by the call for action in several other documents. (See References)

In addition, several pieces of legislation that have recently been enacted, or are presently under debate, require a strong scientific base for decisionmaking. Topics include water quality, wetlands, wilderness, endangered species, biodiversity, global climate change, and old-growth forests.

The National Research Council report argued that an environmental paradigm must be adopted for forestry research and education. The report found that current funding

levels are woefully inadequate. The report identified a research and education agenda and needed program enhancements to meet the agenda.

Specifically, five broad categories of needed research were identified. These are:

- Biology of Forest Organisms. Recent advances in plant biology hold great promise for forestry. To capture this promise, research must be accelerated on such subjects as the physiological and genetic bases of the mechanisms underlying forest health, productivity and adaptability; biotechnology and the forest environment; long-term site productivity; and pest management.

- Ecosystem Function and Management. Responsible environmental management requires a much more thorough understanding of forest ecosystem structure and dynamics, landscape-level ecology, biological diversity, alternative silvicultural systems, and intensive management for wood production.

- Human/Forest Interactions. The needs of people drive the use and misuse of forests. We need to learn much more about the role of forests in urban areas, about recreation and aesthetic values, and about conflict resolution.

- Wood as a Raw Material. Research is needed on technologies for harvesting wood that are environmentally accepted and on the fundamental properties of wood as an essential material.

- International Trade, Competition, and Cooperation. Improvements in international trade, competitiveness, and cooperation in the sustainable production of goods and services from forest resources depend on information. Detailed knowledge about forests worldwide is limited, and information about international trade is sketchy at best.

The National Research Council report found that the demand for scientifically-based information on the status of forests and environmental issues will continue to increase. The report recommended a strengthened extension program as an important technology transfer and education mechanism for forest land owners, natural resource professionals, policymakers, and the public.

The program is described by the National Research Council as ambitious. Fully funded, however, it would serve as a critical and enduring legacy for the people and forests of the future.

The funding levels required over the next five years to fully respond to the recommendations in the National Research Council report are shown in Table 1.

Table 1
Funding Required to Respond to "Forestry Research: A Mandate for Change"
(Millions of Dollars)

	Annual Additional Investment				
Agency or Program	1994	1995	1996	1997	1998
Forest Service Research (1)	18.0	20.0	22.0	24.0	26.0
Cooperative Forestry Research (2)	18.0	24.0	29.0	28.0	28.0
Forestry Competitive Grants (3)	11.0	20.0	20.0	20.0	20.0
Renewable Resources Extension (4)	3.3	4.5	3.0	1.5	0.0
Totals	50.3	68.5	74.0	73.5	74.0

(1) Increase 10 percent per year for five years.
(2) Achieve full authorization level of 50 percent of Forest Service budget in five years.
(3) Achieve $100 million over five years either through National Research Initiative or separate forestry competitive grants.
(4) Achieve authorization level of $15 million annually.

Ecosystem Management Research and Education Initiative -- A First Step

Although the full program recommended by the National Research Council report is critically needed, the realities of current and future budget limitations require that it be implemented in stages. The remainder of this document describes a first step that professionals in government, industry, and universities believe would make an extremely important contribution to the knowledge base required for contemporary resource managers.

Objective

The objective is to develop an initiatve that provides accelerated and consistent long-term funding of forestry and natural resource research and education. It is critical that the necessary investments in research and education be made to address the

pressing forestry and natural resource issues and to support current and future resource management programs.

The problems we are facing are as or more complex than any issue previously dealt with by mankind--we will not be able to provide the needed goods, services and values the people require AND sustain our ecosytems if we do not better understand how those systems function, both now and under some desired future condition.

Focus on Ecosystem Management

A focus is needed in order to make this initiative work and to generate the level of support necessary for implementation. Ecosystem management research is the focus for this initiative.

An ecosystem is a community of organisms and its environment that functions as an integrated unit. Ecosystem management integrates ecological, economic, and social factors to meet human needs through diverse, healthy, productive, and sustainable ecosystems. It addresses both resource supply and resource demand sides of these relationships. It focuses on restoring and sustaining natural ecological processes which keep ecosystems healthy and ensure that those ecosystems can continue to carry out the many environmental services which support all life on earth. It encompasses management and resource harvest and utilization technologies to meet people's needs for resources and resource uses. It addresses social values and conservation practices and incentives.

The scientific basis for ecosystem management requires a combination of (1) basic, long-term scientific inquiry; (2) issue-focused, problem solving interdisciplinary research and technology development; (3) scientific support to the ongoing management of lands and resources, such as through ecological classifications, inventories, ecological analyses, and monitoring and evaluation; and (4) integrating science into the policy-making process.

The application of science to ecosystem management calls for a systematic extension process to: (1) provide continuing education for natural resoruce professionals; (2) enable landowners/managers to adapt and utilize research results; (3) assure basic understanding by public decisionmakers; and (4) reach the general public with education to guide their individual and collective actions.

The research to accomplish these objectives falls into the following categories.

- Ecosystem Management at the Stand or Site Level. Basic studies related to the impacts of resource management and use on the structure, composition, and function of ecosystems.

- Ecosystem Management at the Landscape Level. Research to examine the biological processes, cumulative management effects, and ecosystem responses at the landscape level.

- Dynamics and Mechanisms of Ecosystem Succession following Disturbance. Understanding of natural disturbances and human activities in terms of frequency, severity, and spatial distribution, as factors in ecosystem and resource management.

- Research and Management Methods. Development of new research techinques, statistical procedures, computer applications, and a variety of measurement technologies adapted to an ecosystem perspective.

- Application to Management and Planning. Development of knowledge and technologies for monitoring the impacts of natural succession as well as management on ecosystems at multiple spatial and temporal scales.

- Societal Needs and Economics Considerations. Efforts to improve knowledge of the social, political, and economic impacts of developing and applying ecosystem concepts to resource management.

Ecosystem management is a complex, interdisciplinary process impacting natural resource owners, managers, users, and decisionmakers. Technology transfer is essential to the application of existing and future ecosystem management knowledge. Tailoring educational programs that develop and retain the ecosystem management skill base of these clients is critical if America is to sustain its demand for natural resource goods, services, and values.

Key Elements and Initiatives

- Continues and enhances fundamental or basic research projects at forestry sciences laboratories around the Nation, including Forest Service, universities, forest industry, and other laboratory or center facilities.

- Enhances and expands the research commitment at long-term field research sites, especially long-term ecological reserves and similar watershed systems or forest reserves.

- Enhances and expands interdisciplinary research addressing sociological, biological, and physical factors as whole systems.

- Provides positive incentives for interdisciplinary ecosystem education and research in the Nation's graduate schools.

- Provides for partnerships with the USDA Forest Service, Extension Service, Cooperative State Research Service, the natural resource and forestry academic community, and forest industry.

- Encourages collaborative centers of scientific emphasis that allow scientists to interact and maximize particular strengths.

- Encourages the highest quality science through competitive and collaborative opportunities.

- Provides for systematic extension of research products through education and demonstration for: natural resource professionals; landowners/managers; public decisionmakers; and the general public.

- Allocates new funding and necessary investment in terms of budget, people, and facilities to accomplish the task.

Expected Benefits of the Initiative

- Methodologies to predict responses of ecosystems to management activities and integrated planning and management across stand, site, landscape, and regional levels.

- Better integration of forest production with environmental protection.

- Sustainable ecosystems that provide forest productivity, biological diversity, and a sustainable basis for rural economic development.

- Requisite data, analyses, and understanding for public officials to apply ecosystem science in their decisionmaking and policies.

- High-level competence by natural resource professionals, managers, and landowners on adapting and applying principles and techniques of ecosystem management.

- Increased public awareness on the relationship between people and ecosystems.

- Development of a needed cadre of scientists skilled in conducting interdisciplinary ecosystem research.

Proposal Funding

The funding levels proposed over the next five years are shown in Table 2. The funding shown is additional investments above the expected FY 1993 appropriated funds for each agency or program.

Table 2
Legacy for the Future
An Ecosystem Management Research and Education Initiative
(Millions of Dollars)

	Annual Additional Investment for Ecosystem Management Research				
Agency or Program	1994	1995	1996	1997	1998
Forest Service Research	15.0	15.0	10.0	10.0	10.0
Cooperative Forestry Research	14.0	15.0	12.0	10.0	5.0
Forestery Competitive Grants	7.0	10.0	12.0	7.0	5.0
Renewable Resources Extension	2.2	3.0	2.0	1.0	0.0
Totals	38.2	43.0	36.0	28.0	20.0

REFERENCES

- Sustainable Biosphere Initiative (Ecological Society)
- The Forest Service Program for Forest and Rangeland Resources: A Long-Term Strategic Plan (USDA Forest Service)
- Research Priorities for Conservation Biology (Society for Conservation Biology)
- Safeguarding the Future: Credible Science, Credible Decisions (U.S. Environmental Protection Agency)
- From Genes to Ecosystems: A Research Agenda for Biodiversity (International Union of Biological Sciences)
- Forest Service Research--Strategy for the 90's (USDA Forest Service)
- Global Biodiversity Strategy (World Resources Institute)
- Science and the National Parks (National Research Council)
- Renewable Natural Resource Education--A Report to Congress on the 1991-1995 Renewable Resource Extension Program (USDA Extension Service)
- Reaching the Potential of Private Forests in the United States Through Education (The Extension Service Committee on Organization and Policy's response to the USDA National Forum on Nonindustrial Private Forest Lands)

PLANT BIOSCIENCE BUILDING CONSTRUCTION

WITNESS

DR. PETER DAY, DIRECTOR, CENTER FOR AGRICULTURAL MOLECULAR BIOLOGY, RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

Mr. SKEEN. Dr. Day.

Welcome to the committee, Doctor. We will take your testimony and let you give us an abbreviated form of it and we appreciate that very much.

Dr. DAY. Thank you, Mr. Chairman.

I am Peter Day from Rutgers, the State University of New Jersey, and I am here to testify as briefly as I can on behalf of the CSRS program that provides matching funds for constructing agricultural facilities at American universities.

I have a prepared statement that I would appreciate being part of the record.

Mr. SKEEN. Thank you, Doctor.

Dr. DAY. Rutgers now seeks matching funds to complete a plant bioscience building under this program. In the last six years, you have appropriated $8.3 million for planning and the initial construction of this facility and we are extremely grateful for your confidence in our project thus far. And we now request $1.7 million in federal matching funds to complete phase I.

The state of New Jersey and Rutgers have appropriated $27 million towards the cost of the $37 million first phase of this complex. The university has committed in addition another $10 million for ancillary facilities and in order to begin phase II of the original plan we are also requesting $2.5 million of final federal matching funds of $10 million.

The agricultural experiment station programs support the state's $15 billion agriculture and food industry. Major challenges to that industry include urbanization, competition for natural and human resources, proximity to often incompatible neighbors, and a growing public concern over the impact of intensive agriculture on a fragile ecosystem. And these, of course, are problems that are common to agriculture everywhere. In New Jersey, we experience them sooner and more intensely and our responses we believe can serve as examples to others.

I know that this committee understands the value of maintaining diversity in the nation's agricultural production systems and the importance of healthy agricultural programs in each state.

Our own strategic plan to meet these challenges calls for major capital resources to improve research and teaching facilities for increased annual operating funds and for the establishment of advanced technology centers and to succeed we need to forge partnerships between public and private sectors and state and federal funding sources.

During the last seven years, more than $102 million for capital needs and more than $10 million in new operating funds have been generated in support of our programs in New Jersey. These contributions I suggest provide the strongest possible evidence of commitment by the university and the state to our land-grant mission and responsibilities.

The complex that is under construction now provides space for the Center for Agricultural Molecular Biology which accommodates 16 research groups under my direction. It will also allow us to coordinate this center with academic departments of plant pathology, plant science and entomology by housing them in a single facility.

The building will contain research labs, conference, library and teaching facilities and attached greenhouses and it will provide a high quality training environment for our students. They require this in order to compete successfully for scientific employment in the private and public sectors.

There will also be a branch facility which is now under construction in southern New Jersey for testing engineered plants and microorganisms.

The complex will integrate basic and applied research with extension activities to ensure that agriculture in the northeast remains profitable and environmentally sound and I recommend this enterprise to you.

Mr. SKEEN. Thank you, Doctor. New Jersey being one of the most important agricultural states, I think that we can understand what you are talking about and you do a great job. We thank you and appreciate your testimony and it will be entered into the record.

Dr. DAY. Thank you, Mr. Chairman.

[The information follows:]

Prepared Statement by
Dr. Peter R. Day
Director, Center for Agricultural Molecular Biology
Rutgers, The State University of New Jersey

before the United States House of Representatives Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies

1993

Mr. Chairman:

I am Peter Day, Director of the Center for Agricultural Molecular Biology and University Professor of Genetics at Rutgers, the State University of New Jersey. I am here today to testify on behalf of the United States Department of Agriculture program that provides matching funds for constructing agricultural facilities at American universities. Since the Morrill Land Grant Act of 1862 the Federal Government has played an important role in the federal-state-industry-university partnership that supports our agricultural economy.

Rutgers now seeks matching funds for completing construction of a Plant Bioscience complex under this program. During the last six years this Committee has appropriated $8.3 million for the planning, program design, and initial construction of the facility. We are most grateful for your strong vote of confidence in developing the project this far.

The sole purpose of this facility is agriculture; all space in the building will be used for teaching, research, and public service activities for New Jersey and United States agriculture.

The state and university have appropriated $27 million toward construction of the $37 million first phase of the Plant Bioscience Complex. The University has committed an additional $10 million in ancillary facilities, such as greenhouses and containment facilities for genetically engineered plants. We are now in need of the $1.7 million federal matching component to complete Phase I. We are also in need of $2.5 million of the final federal matching funds of $10 million to begin Phase II in a timely manner, to ensure that the momentum so far generated for New Jersey agriculture and the New Jersey Agricultural Experiment Station will not be lost, and to confirm that the original objectives of the project can be fully achieved.

The programs of the New Jersey Agricultural Experiment Station support the state's $15 billion agriculture and food industry, an industry that is strong and viable, but, like agriculture throughout the United States, faces serious challenges. These challenges result in large part from urbanization and the associated pressures of competition for natural and human resources, the proximity of agriculture to often incompatible neighbors, and growing public concern over the impact of intensive agriculture on a fragile ecosystem. Although these are problems common to all agriculture, in New Jersey, the most urbanized state in the nation, we experience them sooner and more intensely. Our responses can serve as examples to others.

If these challenges are not adequately addressed, they will ultimately result in the deterioration, if not the demise, of agriculture in our state. I am certain that this Committee understands the value of maintaining the diversity of the nation's agricultural production systems and the importance of having healthy agricultural programs in each state.

The New Jersey Agricultural Experiment Station has developed a strategic master plan called Vision 21, to meet these challenges. Vision 21 is a plan to preserve agricultural production nearby and responsive to the nation's largest market. It is designed to strengthen important food processing and packaging industries, protect our fragile coastline and the quality of our environment, properly manage our enormous toxic and hazardous waste problems, and it harnesses new technologies including biotechnology to these ends.

Vision 21 is an appropriately aggressive plan that calls for major capital resources to improve our research and teaching facilities, increased annual operating funds, and for the establishment of advanced technology centers. To succeed, we need to forge partnerships between public and private sectors, and state and federal funding sources.

The plan has been in place for seven years, and I can proudly report the following progress showing the clear commitment of our region, our state, and our university:

1. The New York/New Jersey Port Authority, in support of our marine industry, has provided $13 million toward a $21 million marine science center, which has now been constructed.

2. New Jersey voters recently approved a $350 million Jobs, Education, and Competitiveness Bond issue in support of higher education. The bond, passed by the highest vote margin in the history of the state, provides over $40 million in support of the agricultural experiment station.

3. During that same period the New Jersey Commission on Science and Technology provided $8 million in new operating funds and $10 million in capital construction funds in support of four advanced technology centers operating under the umbrella of the New Jersey Agricultural Experiment Station. These are centers in food science, agricultural biotechnology, food technology extension, and fisheries technology extension.

4. Rutgers, through its Fund for Distinction, has provided $27 million in support of the capital building program at the experiment station. In addition, it has provided working budget increases of $1.7 million to Cook College and over $8 million in support of start-up costs for new faculty and new academic facilities. The university has hired eight world-class scholars as part of its Excellence Program and located them at the New Jersey Agricultural Experiment Station.

5. New Jersey's food production industry also has begun to fund the station, by providing $1 million in grant funding for our Center for Advanced Food Technology and by generating more than $750,000 in support of the center's annual operating budget through membership fees.

More than $102 million for capital needs and more than $10 million in new operating funds have been generated in support of the agricultural experiment station and its strategic plan, Vision 21. These contributions provide the strongest possible evidence of commitment by the university, the state and the region to our land-grant mission and responsibilities.

We are grateful to this Committee, through its study, planning grants, and construction for our Plant Bioscience complex for being such an important partner in these efforts. This building underpins our philosophy that we must integrate the latest technologies with traditional approaches to solve the problems facing modern production agriculture and the environment, in an urbanized setting.

The complex, now under construction, provides space for the Center for Agricultural Molecular Biology, accommodating 16 first-class scientists and their support staffs under my direction; it will also allow us to coordinate the center with the academic departments of Plant Pathology, Plant Science, and Entomology, by housing these units together in a single facility.

The building will contain state-of-the-art research laboratories, conference, library, and educational facilities, and attached greenhouses. Associated with the center will be a branch facility in southern New Jersey for biological risk assessment, critically important for testing engineered plants and microorganisms.

With this fully developed complex, we will be able to integrate basic and applied research with extension activities to ensure that agriculture in the Northeast remains profitable and environmentally sound. It also allows us to provide training for undergraduate and graduate students in plant biology to meet the growing demands for such scientists, who, we anticipate, will be in short supply.

Thank you for your consideration. My colleagues and I from the state, the university, and the agricultural community would be pleased to respond to your questions.

INSTITUTIONAL CHALLENGE GRANT

WITNESS

JAMES A. TWEEDY, VICE PRESIDENT FOR ADMINISTRATION, SOUTHERN ILLINOIS UNIVERSITY, REPRESENTING THE AMERICAN ASSOCIATION OF STATE COLLEGES OF AGRICULTURE AND RENEWABLE RESOURCES

Mr. SKEEN. James Barr?

Well, let us get on here with Dr. Tweedy.

Welcome, Dr. Tweedy. We will take your testimony.

Mr. TWEEDY. Mr. Chairman, my name is James Tweedy. I am Vice President for Administration at Southern Illinois University at Carbondale. I formerly served six years as the dean of the College of Agriculture at that university. I am honored to appear before you today on behalf of the American Association of State Colleges of Agriculture and Renewable Resources, of which I am president of that organization. We are an affiliate of the American Association of State Colleges and Universities.

Our organization, AASCARR, or the American Association of State Colleges of Agriculture and Renewable Resources, represents over 60 public institutions offering baccalaureate degrees in the food, agricultural and natural sciences and annually we graduate approximately 25 percent of the ag baccalaureate degrees awarded in higher education in the United States.

I am here today to support several programs in the budget of the USDA and I would ask that the written statement that I have provided be entered into the record.

Mr. SKEEN. It will be entered, Dr. Tweedy.

Mr. TWEEDY. I would like to comment very briefly on one of those programs and why we are supporting it so strongly and that is the Institutional Challenge Grant. It is in the budget of the Office of Higher Education.

In the first three years of the Challenge Grant program, the schools from AASCARR have received four of these challenge grants. The reason only four were awarded was not because of the quality of the proposals, but because of insufficient funds in the programs.

One of the success stories that I wish to share is based on a project that was funded at the University of Wisconsin at River Falls. This project was funded to show undergraduates how biotechnology is applied to the solution of today's and tomorrow's problems. Through this grant, we are in the process of developing a partnership with the Kellogg Foundation to pursue this and to develop model curricula that can be used throughout higher education in the United States to show students and farmers how to use biotechnology to solve problems. And I share this with you as only one of many examples of how the program has been successful.

I wish to express my sincere appreciation for the opportunity to present this testimony, both written and oral, and I hope that you will be supportive of this request.

Thank you.

Mr. SKEEN. Thank you, Doctor. We are going to give it every consideration. We appreciate your testimony.

[The information follows:]

aascu

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Testimony

to the

Subcommittee on Agriculture, Rural Development, Food and Drug Administration and Related Agencies

given by

Dr. James A. Tweedy
Vice President for Administration
Southern Illinois University
Carbondale, Illinois

on behalf of

American Association of State Colleges and Universities

March 31, 1993 • 5 p.m.
Washington, DC

Mr. Chairman, I am honored to appear before you today on behalf of the American Association of State Colleges and Universities (AASCU) which represents over 375 public colleges and universities located across the nation. An affiliate of AASCU is the American Association of State Colleges of Agriculture and Renewable Resources (AASCARR), which represents over 60 public institutions offering baccalaureate degrees in the food, agricultural and natural sciences, and annually graduate 25 percent of the agriculture baccalaureate degrees awarded in American higher education. AASCU's Council of Rural Colleges and Universities, is comprised of 165 member institutions located in rural settings. These institutions share a mission of teaching, service and research in support of their respective rural regions and work together to address the concerns of rural America.

Today's agricultural industries and educational and research institutions are faced with unique challenges. The production and delivery of agricultural products is becoming more technically oriented. Producers of agriculture products must meet a greater demand for their products, and a higher standard of quality. These consumer demands have resulted in the need for an increasingly highly educated workforce trained to work in all phases of the agriculture industry.

In order to meet industries' needs, colleges and universities of agriculture must continue to revitalize undergraduate curricula, foster university industry partnerships, modernize laboratories and equipment, and enhance recruitment and retention of minority and other non-traditional students.

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Congress has been supportive of programs which address these critical needs, and we encourage your continued support of several programs administered by the U.S. Department of Agriculture. Programs such as Institutional Challenge Grants and Graduate Training Fellowships have proven their worth in supporting revitalization of curricula, upgrading equipment, developing distance learning and satellite programs, supporting research and enhancing recruitment, particularly recruitment of minorities into agriculture programs.

AASCU and AASCARR recommend the following funding levels for these USDA programs:

$6,000,000	**Institutional Challenge Grants**
6,000,000	**Graduate Training Fellowships**
4,000,000	**Minority Scholars Program**
11,500,000	**1890 Institution Capacity Building Grants**
1,000,000	**Telecommunications**
1,000,000	**International Higher Education**

These programs have proven their worth in the past. For example:

The University of Wisconsin at River Falls was awarded a Challenge Grant to develop programs to show undergraduates how biotechnology is applied to the solution of today's and tomorrow's problems. Biotechnology is critical to the future of agriculture and students must be educated as to what biotechnology is and what it can and cannot do.

. California State University at Fresno utilized a Challenge Grant to develop advance learning technology in animal, plant and human nutrition science. They are implementing state-of-the-art electronic technology by using computers and a variety of multimedia techniques.

Texas A&I University has developed an innovative program to address teaching in a bi-cultural environment. This program enhances faculty skills in working with Hispanic students enrolled in agricultural programs. This was a national cooperative effort among universities with a regional workshop conducted in California, Arizona and Texas.

Funding these programs at the above stated levels will enhance the educational capacity needed to prepare our nation's youth to meet the science and technology demands of the food and agriculture system. These funds ensure an adequate supply of human capital to sustain modern agriculture and subsequently our American way of life.

The face of rural America has changed in the past two decades, shifting from an agriculturally-based economy to a more diverse economy representing a broad range of industries. Institutions of higher education located in rural areas are a major source of employment, cultural opportunities and health care for their communities. These institutions are an integral part of their communities, it is nearly impossible to delineate clearly where the university ends and the community begins.

Institutions of higher education located in rural areas are committed to the success and vitality of their communities. They have vast resources that are available and strategically positioned to be used for community and rural development.

We urge your continued support of programs such as the **Distance Learning and Medical Link Grant Program**, in order to develop the use of telecommunications technology in rural America. Currently funded at $5 million for FY 1992 and FY 1993, this program, administered by the Rural Electrification Administration was authorized for $550 million over a five year period. We encourage you to fund this program at the authorized level for the next three years.

Rural revitalization is important to the future of this country. Therefore, we are supportive of programs such as the **Rural Development Grant Program** which make funds available to small communities to promote economic development. We would encourage this committee to make more funds available in the form of grants to enable small communities to develop innovative programs to address their individual needs.

By supporting these programs, Congress will continue to make strong strides towards addressing the current needs of rural America. On behalf of AASCU and AASCARR, I appreciate your efforts to improve life for Americans living in rural areas.

RESEARCH FUNDING

WITNESS

ROBERT L. KIDD, CHAIRMAN, COUNCIL FOR AGRICULTURAL RESEARCH, EXTENSION AND TEACHING (CARET)

Mr. SKEEN. Robert Kidd.

Mr. KIDD. Thank you, Mr. Chairman.

Mr. SKEEN. Thank you, sir.

Mr. KIDD. My name is Bob Kidd and I am Chairman of the Council for Agricultural Research, Extension and Teaching commonly known as CARET and I am here to endorse the NASULGC Board on Agriculture's fiscal year 1994 budget.

We are in the process of waiting for the president's figures so we can make a comparison to our own and you will have that document as soon as the president's budget is released.

Mr. SKEEN. We are waiting with bated breath right along with you. [Laughter.]

Mr. KIDD. As you very well know, CARET is a grassroots users group of the programs and processes delivered by the nation's land-grant university system.

Delegates from the states and territories meet on a regular basis to provide input as to the needs of the constituencies of the College of Agriculture and to evaluate the performance of the system as it attempts to meet these needs.

In the interests of time, I would like to highlight the important points of my testimony and request that my full written remarks be included in the record.

Mr. SKEEN. They will be entered.

Mr. KIDD. I would like to point out that my written remarks include several examples of some of the accomplishments of the land-grant university system as it has responded to the needs of the people.

It is the consensus of CARET that the functions of research, extension and teaching are being maintained on a bare bones budget basis within our colleges of agriculture. The system that has served this nation so well for almost 130 years is in decline which is alarming in that it is the solution to many of our nation's problems.

In my own situation, I have been a rancher very dependent upon BLM and Forest Service lands. I have exported live cattle to Japan, participated in honey exports to the Pacific Basin and am active in the export of artemisia to shrimp farmers around the world. I must tell you that my ability to be active in these mentioned endeavors is largely the result of the preparation I received as a student of agricultural economics and being an ongoing recipient of the benefits of the College of Agriculture's programs in research, extension and teaching.

Every individual member of CARET has their own story to tell as to the benefits of working with their College of Agriculture and President Clinton has stated that the land-grant system is one of our nation's greatest successes.

With 73 land-grant universities, including the 1890s and Tuskeegee, the related experiment stations and the cooperative extensive

system providing educational outreach in over 3000 counties throughout the United States and its territories, the infrastructure is in place to respond to our nation's needs.

Mr. Chairman, I would like to thank you for the opportunity to speak with you today and submit my written testimony and I would be very pleased to answer any questions you may have.

Mr. SKEEN. Thank you very much, Mr. Kidd. Being a recipient of great advice from a member of CARET who happens to be my wife— [laughter].

I think you have done a good job making your presentation. Thank you very much.

Mr. KIDD. Thank you.

[The information follows:]



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TESTIMONY BY

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CHAIRMAN
COUNCIL FOR AGRICULTURAL RESEARCH, EXTENSION
AND TEACHING (CARET)

BEFORE THE
SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE,
FDA AND RELATED AGENCIES
OF THE
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

MARCH 31, 1993

A voluntary citizens organization cooperating with the
National Association of State Universities and Land-Grant Colleges • Board on Agriculture

Mr. Chairman and Members of the Subcommittee, I am pleased to appear before you today to offer comments on the agricultural research and education programs of USDA and the land-grant university system. My name is Robert Kidd. I am from Wyoming where I am involved in ranching and agricultural exports. I currently serve as the chairman of the Council for Agricultural Research, Extension and Teaching (CARET). CARET is a national voluntary citizens organization whose membership is comprised of such individuals as agricultural producers, commodity leaders, agribusiness leaders, state and local officials, homemakers, consumers and members of agricultural advisory boards. Each state and territory is represented by at least one delegate. CARET was established in 1982 as a mechanism through which citizen support could be expressed for the agricultural research, extension and teaching programs of the land-grant university system.

In his recent State of the Union Address, President Clinton stated that the land-grant system is one of our nation's greatest success stories. This system of higher education does what most others do not: it develops its programs -- most particularly within its agricultural research, extension and teaching programs -- to respond to the needs of the people resident within each individual state and territory. These programs respond to the input from advisory boards and user groups, such as CARET, so that the people's needs can be met. This level of accountability is what makes the land-grant university system so different from all other university systems. This is indeed a system which can deliver solutions to many of the problems facing the American people both today and in the future.

Today, I would like to share briefly with you CARET's priorities regarding these programs. CARET's number one priority has always been and remains the base program funding for Hatch, Smith-Lever, the 1890s, McIntire-Stennis and Morrill-Nelson. These programs provide the essential infrastructure for what constitutes the core of the agricultural research and education programs of the land-grant university system. Without this base, the land-grant system would not be in a position to respond to its mandate to transfer new knowledge and technology to those in the food and fiber system, rural America and increasingly to those in our nation's urban centers.

Unfortunately, over the past decade this success has been jeopardized because funding for these programs has not kept pace with inflation. This decline in real dollars has resulted in severe staff and program reductions in most states. There is, at this juncture, an urgent need for these base programs to receive at least a five percent increase over current funding levels in order to strengthen and minimally boost current capacity. Further decline would seriously impair the land-grant system's ability to meet the needs of the people it is mandated to serve.

Besides the base programs, CARET supports several priority initiatives: (1) the competitive grants program, also known as the National Research Initiative; (2) the Extension initiatives such as Sustainable Agriculture, Youth at Risk, Rural Economic Development, nutrition programs; (3) and the higher education initiatives of Institutional Challenge Grants, Minority Scholars, Graduate Training Fellowships and 1890 Capacity Building Grants; and (4) the inclusion of an international component in these agricultural research, extension and education programs.

(1) The National Research Initiative allows for important and necessary basic research to be undertaken. This is the research that provides the basis for further investigation into such things as bio-controls that allow plants to naturally repel pests, thus reducing the need for pesticides. Through research alternative fuels can be developed and perfected creating both cost saving measure for farmers and increasing their profitability. The National Research Initiative also allows for important multi-disciplinary research to be undertaken.

(2) Extension is one of the most effective outreach systems in the United States. Technological advances are effectively transferred from the laboratory to the field, home or community. With new knowledge and technology continually being developed, an educational transfer mechanism is vital for the members of our communities. The Extension System is seeking to launch several new programs, including Sustainable Agriculture, Rural Economic Development and targeted programs such as Teen Pregnancy and Health in the 1890 community. Continuing programs of importance include EFNEP, Youth at Risk, and Indian Reservation Extension Agents. Each of these programs seeks to address problems and challenges facing people across America. They have been identified as needs by the actual people living in our communities.

(3) The key to sustained scientific advancement is the strength of our human resource capacity. The academic programs of the land-grant university system offer unique opportunities for highly qualified students to continue in agriculture and become the important conduits to future knowledge and programs. To date, these programs have not received an adequate level of funding. But the funding of a Minority Scholars Programs, and increasing the funding for the Institutional Challenge Grants and the Graduate Training Fellowships there is a future for agriculture because bright minds will be engaged in agriculture.

(4) Essential to our nation's ability to compete in a global economy is a firm and productive understanding of that economy. In the 1990 farm bill, Congress authorized an enlarged role for agricultural research and education programs in terms of collaboration with institutions throughout the world which are engaged in related activities. The inclusion of an international dimension of in agricultural research and education, not as a separate component, but fully

integrated into these activities is a necessity. With other countries becoming more and more competitive in agriculture, the United States needs to make an investment in agricultural research, extension and teaching so that our nation can remain the strong competitor it is.

Mr. Chairman, we understand the budget constraints under which you and your colleagues are operating. And we understand the numerous demands being put to you. We in CARET do believe, however, that the land-grant university system can assist you in responding to many of these demands such as a safer food supply, a protected environment, and economic development in our nation's rural communities. The land-grant system is prepared to work more closely with you. We in CARET would urge for you to use this system more fully in order to meet many of the challenges being put to you.

Attached to my testimony is a short listing of ways in which land-grant universities have helped over the years. I include these examples so that you can appreciate the depth and breadth of these programs and how, in many instances, we have come to take for granted the enormous contributions made by these universities. As soon as the President's budget is available I will make available to each member of this subcommittee a copy of the FY94 Budget Recommendations of the Board on Agriculture of the National Association of State Universities and Land-Grant Colleges (NASULGC), which recommendations CARET enthusiastically supports and into which CARET had significant input.

Mr. Chairman, thank you for the opportunity to speak with you today. I would be pleased to answer any questions you may have.

CENTER FOR FOOD MARKETING AT SAINT JOSEPH'S UNIVERSITY

WITNESSES

HON. LUCIEN BLACKWELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

REV. NICHOLAS S. RASHFORD, PRESIDENT, SAINT JOSEPH'S UNIVERSITY

RICHARD KOCHERSPERGER, DIRECTOR, FOOD MARKETING PROGRAM AND CHAIRPERSON, FOOD MARKETING DEPARTMENT

Mr. SKEEN. We have with us the Honorable Lucien Blackwell from Pennsylvania.

Welcome to the committee.

Mr. BLACKWELL. Thank you, Mr. Chairman.

Mr. Chairman and members of this committee, I am pleased to join today in spirit with my fellow Philadelphia colleague, Mr. Foglietta, who regretfully was not able to attend. Together we wanted just to express our thanks for your continued support for the Center for Food Marketing at Saint Joseph's University.

This superior program is located in my congressional district in Philadelphia. As you know, Saint Joseph's food marketing programs are nationally recognized and enjoy the strong support of the members of the food industry in Philadelphia and around the country.

The center helps farmers, farm cooperatives and production and distribution companies to be more responsive to the needs and preferences of consumers. The center also coordinates production decisions with marketing plans and ultimately makes America's food industry more efficient and more competitive both at home and abroad. I hope you will continue to support this important project.

I have here with me a very fine person from the City of Philadelphia, Father Rashford, who is the President of one of the finest universities in the world, St. Joseph's University. In everything he does, he is always successful so when you support him, you know it is going to be a successful and worthwhile endeavor. I certainly appreciate one subcommittee time and consideration.

Mr. SKEEN. We will support anybody that is successful and which will help us be successful, too.

Mr. BLACKWELL. He will help.

Mr. SKEEN. Thank you.

Thank you, Father. We are glad to have you.

Reverend RASHFORD. Congressman Blackwell, thank you.

Mr. Chairman, I am Father Nicholas Rashford, President of Saint Joseph's University in Philadelphia and it is a pleasure for me to be appearing before your subcommittee again this year.

Joining me on my left is Professor Richard Kochersperger, Director of the Food Marketing Program and Chairperson of our Food Marketing Department.

In deference to time, I ask the committee to accept my written statement and only make a few preliminary remarks.

Mr. SKEEN. It will be done, Father. Go ahead.

Reverend RASHFORD. For three decades now Saint Joseph's University has played an important role in food marketing education. While our colleagues in the land-grant universities have worked

very hard to improve U.S. agricultural production through research, Saint Joseph's has concentrated on improving the marketing of agricultural commodities and products.

Over the years, the Saint Joseph's Department of Food Marketing has become the nationally recognized academic home of the U.S. food industry. Today, our food marketing program is the only industry supported endeavor of its kind in the nation and it is supported by a very long list of food industry and farm related companies and organizations.

As you know, we came before you three years ago to request your support in our effort to establish a Center for Food Marketing on our campus. And, as you know, we have requested the Federal Government join in a 50/50 funding partnership with our institution and its industrial affiliates to finance the construction of the $25,600,000 center.

Recognizing the merit of the project, your subcommittee has already provided us with a total of $5,600,000 over the last three fiscal years through the Cooperative State Research Service Facilities Program. We are honored by the subcommittee's confidence in our proposal and its potential.

So that we may move forward expeditiously with construction of the center, we are hopeful that the subcommittee will provide us with a final allocation of federal funds in the amount of $6,750,000 in its fiscal 1994 bill. This final grant will allow us to break ground in the fall of 1993 with completion due about summer of 1995.

We thank you again for your continued support of St. Joseph's University and the Center for Food Marketing.

Mr. SKEEN. Thank you, Father. Glad to have you back again and we would like to help you complete your project and we appreciate the work that you do.

Well, I will tell you what, we do not want you hurt. [Laughter.]

Mr. BLACKWELL. Thank you, Mr. Chairman. Thank you very much.

Mr. SKEEN. Thank you. Thank all of you.

[The information follows:]

STATEMENT OF

FATHER NICHOLAS RASHFORD
PRESIDENT
SAINT JOSEPH'S UNIVERSITY

BEFORE THE
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON AGRICULTURE
UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 31, 1993

Mr. Chairman, I am Nicholas Rashford, President of Saint Joseph's University of Philadelphia. It is a pleasure to be appearing before your subcommittee again this year. Joining me today is Professor Richard Kochersperger, Director of our Food Marketing Programs and Chairman of our Food Marketing Department.

Mr. Chairman, I would like to begin by thanking you and your subcommittee for your support over the last three fiscal years for funding for our Center for Food Marketing. We are pleased and honored by your confidence in our proposal, and its potential to dramatically expand the reach of our food marketing program to farmers, farm cooperatives and the food industry both in our region and nationally.

Project Background and Description

Mr. Chairman, I know you are aware that for three decades Saint Joseph's University has played an important role in food marketing education. While our colleagues at land grant universities in Pennsylvania and elsewhere have worked successfully at improving U.S. agricultural production through research, Saint Joseph's has contributed to the advancement of the nation's agricultural economy by concentrating on the marketing of agricultural commodities and products. This was a natural undertaking for Saint Joseph's because of our location near the port of Philadelphia, one of our nation's most important points of commerce for agricultural and other products.

Mr. Chairman, over the years, the Saint Joseph's Department of Food Marketing has become the nationally recognized "academic home" of the U.S. food industry. Today, our Food Marketing Program is the only industry supported endeavor of its kind in the nation and is supported by a long list of food industry and farm-related companies and organizations.

The Department of Food Marketing conducts food industry research projects, farm industry marketing research programs, executive seminars, internships and cooperative educational and research programs among students, agricultural sector government officials, farms, and farm cooperative and food industry executives. The Department is the university's largest with 500 undergraduate students; 150 food company executives in the M.S. Food Marketing Program from nearly 100 companies; 250 executive M.B.A. students from the pharmaceutical industry. In addition, the Food Marketing Department educates many of the university's 1800 M.B.A. students.

Marketing and Food Marketing majors account for twenty percent of the University's undergraduate population and fifty percent of the students enrolled in the College of Business and Administration. More than 1,500 Food Marketing graduates have gone on to careers and leadership positions in the food industry.

The Department of Food Marketing houses the Food, Nutrition and Health Research Institute for the purpose of assisting food marketers to develop and deliver products and marketing communications that encourage sound nutrition and promote good health. The Institute is the only size in the country with the following national probability sample surveys available for immediate access for analysis of individual records:

- National Health and Nutrition Examination Surveys (NHANES)
- Hispanic Health and Nutrition Examination Surveys (HHANES)
- NHANES I Epidemiologic Follow-up Study
- National Evaluation of the Program for Women, Infants and Children (WIC)
- Nationwide Food Consumption Surveys (NFCS)
- Continuous Survey of Food Intake Individuals (CSFII)

These data are used to examine food consumption behavior patterns, nutrient intake, and health status. Various problem definitions are addressed through analysis of the government nutrition surveys which provide input to strategic plans, product development, advertising claim substantiation, and target market research.

International Programs

One of the key dimensions of business education in the 1990s will be globalization, as an essential ingredient in strengthening America's competitiveness in the world's market place. The Department of Food Marketing has aggressively sought and successfully implemented international programs, providing a range of opportunities for students and industry alike. These include international marketing study tours; faculty exchange programs with University College, Cork, Ireland; and international food marketing strategy seminars, educational programs, and cooperative agreements with industry groups in Germany, the Dominican Republic, and Puerto Rico, and the old Eastern Bloc countries. The Department plans to expand its partnerships with institutions in Central and South America. These programs are designed both to prepare students for careers in a business world that is truly international in scope and to "build bridges" with new cultures and economies.

Industrial Support

Through the Academy of Food Marketing, Saint Joseph's has established strong industry ties which support the Food Marketing program in our placement of graduating seniors, academic programming, and scholarship support. A unique Board of Governors made up of chief executive officers and senior executives from industry provide direction, counsel, planning, and financial support to the Food Marketing Program. The Academy houses the Campbell Library, a depository of Food Marketing and Agricultural information.

The National Need for the Food Marketing Center

Mr. Chairman, we are convinced that a greater national focus on food marketing is vital to the health and welfare of American agriculture. The ability to produce agricultural goods efficiently is no longer enough. Food growers and producers must be aware of the desires of consumers and recognize how qualities can be tailored to demand, coordinating production decisions with marketing decisions and change. Individual farmers must become more directly involved in promoting their products. The marketing efforts of the agricultural/foods sectors will determine whether or not the U.S. can meet the challenge of satisfying changing consumer demand at home and capturing changing markets abroad.

We believe that the establishment of a Center for Food Marketing at Saint Joseph's University, built upon our nationally recognized food marketing program and longstanding partnerships with farmers and the food industry, can and will make a difference for the nation. It is our vision that the Center for Food Marketing will greatly expand our reach to more farmers, farm cooperatives, farm organizations and good producers, bringing to them the most innovative and up-to-date food and commodity marketing strategies and methods. We envision that the Center for Food Marketing will become a national resource for food marketing research, education, training, and information, working in close cooperation with U.S. Department of Agriculture and other agriculture research agencies.

The University's Board of Trustees and the Academy of Food Marketing Board of Governors are committed to the long term enhancement of food marketing research and education at Saint Joseph's University through the establishment of the Center for Food Marketing. The food industry's consistent, strong financial support over three decades is the best guarantor of continued support in the future.

The establishment of the Center for Food Marketing will enable a doubling of our graduate student body and of our faculty and research support staff. The incorporation of sophisticated telecommunications, conferencing, and translation facilities will allow us to reach a wide audience to enhance the competitiveness and profitability of the entire domestic food distribution network, from farmer to retailer.

Funding Requirements of the Center

Mr. Chairman, we believe that the Center for Food Marketing will help the U.S. Department of Agriculture meet its mission in the food marketing area. As a result, we are requesting that the Federal government join in partnership with our institution and the farm and food industries in financing the construction and equipping of the Center for Food Marketing. As you are aware, we intend to build a 100,000 square-foot facility to house the Center for Food Marketing and several related and supporting university units. The total cost of constructing and equipping this facility will be $25,600,000. Saint Joseph's University and its industry partners will contribute $13,200,000 toward this cost. **We are**

requesting that the federal government contribute a total of $12,400,000. Operational costs of the Center, one it is up and running, will be borne solely by the University, its Food Marketing program and its industrial partners.

Mr. Chairman, it is our plan to break ground for the new center and begin initial construction activities in Fall 1993 and continue construction until completion sometime in Summer 1995. Toward the achievement of this objective, your Subcommittee already provided the Center with $600,000 in Fiscal Year 1991, $2.7 million in Fiscal Year 1992, and $2.3 million in Fiscal Year 1993 through the Cooperative State Research Service facilities program. The FY91 funds were used for initial architectural and engineering activities and site preparation; unfortunately, the inclusion of this Subcommittee's FY92 support on the President's rescission list -- which was later rejected -- slowed our progress somewhat. So that we may move forward expeditiously with construction of the Center, we are hopeful that the Subcommittee will provide us with a final allocation of Federal funds -- in the amount of $6,750,000 -- in its FY 1994 bill. This final grant will allow us to move directly to the construction phase of the facility.

Request for Programmatic Support

In addition, we are hopeful that the Subcommittee will consider providing us with a Cooperative State Research Service program grant to support the development of an state-of-the-art information resource center at the Center for Food Marketing.

The mission of the Center is to provide professional and educational services to the food industry. To support this mission, a comprehensive database, previously not available to the food industry, will enable more effective agricultural production, and more efficient food manufacturing, distribution, and sales activities. This database will include information on the entire food industry supply chain, compiled by Saint Joseph's University faculty from the Departments of Economics, Computer Science, Finance, Accounting, and other academic disciplines, coordinated by the Food Marketing Department.

Specifically, consumer purchase patterns collected directly from point of sale equipment will be analyzed to identify consumption trends, assisting farmers/producers, wholesalers, and retailers to be more efficient through the application of consumer feedback information received through the latest technology. By establishing a "real time" global data base of customer wants, needs, responses, and perceptions, participating organizations will become empowered to market their products at the lowest possible costs and to service their customers effectively.

The information center also will include a sophisticated satellite communication system and a powerful computer network. Saint Joseph's University already has made a substantial investment toward this goal by putting in place a fiber optic network and has successfully utilized teleconferencing systems to communicate with food companies. This

systems capability will be expanded to share programs and information with other universities around the country. The center will also offer a complete video production facility which will provide educational programs in a "real time" mode as appropriate.

In order to support the planning and development phase for the design of the information resource component of the Center for Food Marketing, Saint Joseph's University is hopeful that the Federal government will provide a grant in the amount of $250,000. From this study and evaluation, the expected benefits and impact of the information system, as well as its operational configuration, will be specifically identified.

Thank you, again, for your continuing support of the Center for Food Marketing.

LAMAR COUNTRY AGRI-CULTURAL CENTER

WITNESSES

HON. ROSE MARIE SMITH, MAYOR, CITY OF VERNON, AL

CHARLES E. SMITH, JR., OHIO STATE UNIVERSITY AND UNIVERSITY OF MISSISSIPPI

Mr. SKEEN. Rose Marie Smith. Welcome to the committee. We would like to have your introduction.

Ms. SMITH. Mr. Chairman, I am Rose Marie Smith, the mayor of Vernon, Alabama.

Mr. SKEEN. Congratulations. That is the toughest job I know, being mayor.

Ms. SMITH. Amen.

Vernon plans to convert its old National Guard armory into the Lamar County Agri-Cultural Center with renovations which will cost approximately $660,000. Of this amount, we are requesting $330,000 from the Buildings and Facilities Program.

The city is pledging $330,000 to complete the structure and we are currently spending $50,000 on architectural fees. We also plan to operate the center once it is complete. Obviously given time constraints I cannot explain the entire need for the center but I would like to ask that the entire request be made part of the record.

Mr. SKEEN. We will make the entire text of your request entered in the record.

Ms. SMITH. Thank you. Just now I will give you just a brief description of the center.

This will house the Lamar County Extension Service and all its educational and research branches. In the auditorium, children, youth, farmers and homemakers from across our county will have access to extension satellite educational programs for the very first time. Also for the first time extension will have an adequate kitchen facility to teach 4-H'ers and homemakers. Office space will be ample for conducting extension research on feed mixes, pest control, demographics, et cetera. An agricultural scientific library in this facility will be a one-of-a-kind teaching tool in northwest Alabama.

In addition, all county agencies will be able to utilize this facility, particularly the auditorium and meeting rooms, for teaching and cultural activities, hence the name Agri-Cultural Center.

We believe that this project fits into the concepts and guidelines of the Buildings and Facilities Program and would like to ask it to be included as a line item in the budget.

Thank you. Do you have any questions?

Mr. SKEEN. How long have you been mayor?

Ms. SMITH. Since October 5th.

Mr. SKEEN. Congratulations. I think that the town has done itself very well.

Ms. SMITH. Thank you.

Mr. SKEEN. Thank you for your testimony and thank you for being here. We will give every consideration to this request.

Ms. SMITH. Thank you.

Mr. SKEEN. Thank you. Well done.

[The information follows:]

CITY OF VERNON
AGRI-CULTURAL CENTER
PROPOSAL

PREPARED STATEMENT PRESENTED BY
ROSE MARIE SMITH
MAYOR OF VERNON, ALABAMA
and
CHARLES E. SMITH, Jr., ABD
INSTRUCTOR POLITICAL SCIENCE
OHIO STATE UNIVERSITY
ASSISTANT PROFESSOR
OF POLITICAL SCIENCE
UNIVERSITY OF MISSISSIPPI

In April of 1985 the City of Vernon, county seat of Lamar County, Alabama, purchased the city's old National Guard Armory for approximately $40,000, with the intent of converting it into a Civic Center. However, because no funds were available for that conversion, the armory became a city shop, the purpose it serves today. In the interim, other things have happened: the building has deteriorated; community needs have increased and broadened; and a new administration has come on board with a commitment to reclaim the city's initial investment in the building and at the same time address the various economic, educational, developmental, and cultural needs of the city and county. In order to achieve these ends, the City is proposing a $660,000 renovation of the old

National Guard Armory into an Agri-Cultural Center. The main purpose of the center will be to house the Lamar County Extension Service and all the innovative community programs which have been created by the Extension Service. These include the Lamar County Health Council, Rural Development Council, Economic Development Council, and Leadership Lamar, vital organizations for education and development in a rural county which ranks 35th among Alabama counties in per capita income. Of course, educational programs of Extension involve 4-H youngsters, homemakers, farmers, etc., and the auditorium and meeting rooms of the facility will lend themselves to educational programs for all these groups. The center's auditorium and conference rooms will also serve as teaching centers for Extension's unique satellite system which could serve, not only farmers and homemakers, but also personnel of Mental and Public Health, the Department of Human Resources (DHR), and similar human service agencies, all located in Vernon. (Presently, Extension's satellite programs can only be presented to a limited audience because of lack of space.) These same facilities in the center will serve Youth at Risk, Extension's program which does in-depth research on teens and their problems in the TAP program. The center will also house a kitchen where Extension can conduct educational demonstrations in food safety, food storage, and food preparation. In addition the center will house space for cotton scouting, a research program to determine the extent of the Boll Weevil invasion in Northwest Alabama, and the Feed Analysis Program, a research program which determines the proper mix for cattle feed for Lamar County cattle and dairy farmers. Extension's extensive research into demographics, research which leads to development of programs which positively impact Lamar's farmers and homemakers, will also be done at the center. Finally, the center will house a

library dedicated to agricultural and related sciences, and this part of the facility will be a one-of-a-kind teaching facility in this rural area.

As with all the other parts of the center, the library will not only serve Extension's primary participants, 4-H youth, homemakers, and farmers, but it will also serve the Lamar County High School (LCHS) and will become the depository of LCHS's Agriculture Department's literature. Since the center will be done in conjunction with overall school expansion, this scientific library, dedicated to agriculture, forestry, and the environmental sciences, will become a significant teaching tool for all LCHS students.

In a similar manner, the entire center will serve ALL the extracurricular needs for LCHS, a school facility whose auditorium (the only auditorium in Vernon) was built in the l930s. In addition, the Vernon campus of Bevill State Community College will utilize the entire facility for its programs.

Of course, Bevill State and LCHS students and faculty will also be able to use all other aspects of the center, as will other residents of Vernon and Lamar County. The auditorium, for example, can become the site of the Junior Play, the annual Band of Gold Concert, countywide Senior Citizen's Day programs, etc. For clients of Mental Health, the Association of Retarded Citizens, DHR, and related agencies, these cultural activities are largely educational. Meeting rooms can serve businesses, industries, and families, and the City of Vernon can use these rooms in a drug awareness program conducted through a proposed VISTA project.

The only problem is a lack of funds to see this project to fruition, and for that purpose the City is asking help from the Buildings and Facilities Program. Realizing that Buildings and Facilities only funds fifty percent, the City of Vernon is pledging its financial support to complete the project. The City Council has given its unconditional stamp of approval to this project and has taken the first step toward its completion by authorizing architectural plans to be complete by April 10, 1993 (at a cost to the city of $50,000).

The Lamar County Agri-Cultural Center will be a **research and teaching facility without equal in Northwest Alabama**. Because of this, and because the project fits into the concepts and guidelines of the Buildings and Facilities Program, the City of Vernon is requesting **a line item appropriation of $330,000.**

CITY OF VERNON
Proposed Agri-Cultural Center
Old Armory Building

PRELIMINARY COST ESTIMATE

ITEM NO.	DESCRIPTION	COST	TOTAL
1	Exterior Repair and Renovation	$125,000.00	$125,000.00
2	Site Development (Parking, Drainage, Signage)	75,000.00	75,000.00
3	Interior Renovation and Construction (Including Electrical and Mechanical)	400,000.00	400,000.00
	A. Total Construction Cost		$600,000.00
	B. Architect and Engineer Fees		60,000.00
	C. TOTAL PROJECT COST		**$660,000.00**

PROPOSED AGRICULTURAL CENTER

for

CITY OF VERNON

Fact Sheet

1. 13,500 Sq. Ft. Total
2. Agricultural Library - 1500 Sq. Ft.
3. Lamar County Extension Service - 1300 Sq. Ft.
4. Meeting Rooms - 1200 Sq. Ft.
5. Auditorium Seating - 500
6. Parking - 150 Spaces on Site (Additional 150 Adjacent to Site)

AGRICULTURAL RESEARCH

WITNESS

CARL SCHNEIDER, PICKLE PACKERS INTERNATIONAL

Mr. Skeen. Carl Schneider and a panel. Is this the Pickle Packers?

Mr. SCHNEIDER. This is the Pickle Packers.

Mr. SKEEN. This is one of my favorite groups of folks every year. I knew it, I knew it. Do we have to declare these? [Laughter.]

Mr. SCHNEIDER. I will even give you an "I like pickles" button.

Mr. SKEEN. An "I like pickles" button? Thank you.

Mr. SCHNEIDER. Mr. Chairman, my name is Carl Schneider. I am Director of Agriculture for Vlasic Foods. I am here today on behalf of Pickle Packers International and its member companies. I would like to respectfully thank you for this opportunity to present testimony as well as thank you for your support and guidance to the Agricultural Research Service and the USDA in the past.

P.P.I. asks that you consider additional funding during the upcoming year for both the food fermentation laboratory at North Carolina State University and the Crops Research Laboratory at the University of Wisconsin.

Each of these research facilities has an outstanding history of providing the producer and the processing industry with practical technology to provide the consumer with safe, wholesome food at an economical value.

The vegetables we supply the consuming public are considered a minor amount among horticultural crops. They do, however, provide hundreds of thousands of jobs in all size operations from the farm to the processor to the consumer. Pickling cucumber consumption alone exceeds more than 750,000 tons annually. The processing of pickled onions, peppers, cauliflower and other minor horticultural crops provide cash income to growers and jobs in the processing industry and related supply industry.

The Crops Research Laboratory at the University of Wisconsin is working towards improvements in pickling cucumbers, carrots and onions. Progress has recently been completed on a naturally occurring innocuous bacterium that can protect harvested food from rotting. Progress continues to be made on varieties that have improved disease resistance, pest resistance, as well as germ plasm that results in improved quality and volume.

Investigation is underway currently to increase the nutritional value of pickling cucumbers by improving the Vitamin C content. The long term benefits here are to the consumer as well as the producer.

The Food Fermentation Laboratory at North Carolina State University has been instrumental in the development of technology that has made available to the consumer new and better products that can be produced in an environmentally safe and sound manner. The efforts of this laboratory is in reducing chloride use, recycling brine and making the industry more environmentally safe. Development of closed tank technology is an effort that will provide food safety for the consumer. The effort of this laboratory

has been one of being proactive to the needs of industry and the consumer.

Pickle Packers International understands the necessity to get the most out of every dollar in a time of limited funding. It should be noted that during the past six years Pickle Packers International has granted these two laboratories over $500,000 in funding. With the cooperation between industry and government, we will remain an important competitive industry in the local as well as the international market.

We would ask that the prepared testimony be entered into the record and, Congressman, if there are any questions, we would be pleased to answer them.

Mr. SKEEN. Thank you, Mr. Schneider, and your complete text will be entered in the record. We appreciate your testimony and it is always a pleasure to have you back here. Since I have been on this committee, I have always enjoyed it. You are good competitors and you are out there and we are very proud of you.

Mr. SCHNEIDER. Thank you, sir.

Mr. SKEEN. You have a great industry.

Mr. SCHNEIDER. Thank you.

Mr. SKEEN. Thank you.

[The information follows:]

A STATEMENT OF CONCERN FOR SUSTAINED AND INCREASED RESEARCH BY THE AGRICULTURAL RESEARCH SERVICE/USDA AND in particular for the:

Food Fermentation Laboratory, ARS/USDA
Department of Food Science
North Carolina State University
Raleigh, North Carolina
Research Leader, Dr. Henry Fleming

Crops Research Laboratory, ARS/USDA
Department of Horticulture
University of Wisconsin
Madison, Wisconsin
Research Leader, Dr. Philip Simon

Principal Witness: **Mr. Carl Schneider, Vlasic Pickles**
Farmington Hills, Michigan
For the Field Research and Research and Development Committees,
Pickle Packers International, Inc.

ON THE OCCASION OF Hearing March 31, 1993, U. S. House Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies.

Thank you for allowing us to present this statement of concern. Pickle Packers International, Inc. is a not-for-profit trade association representing the makers of pickled vegetables including, cucumbers, peppers, onions, carrots, cauliflower, tomatoes, okra, green beans and other vegetables. The organization has voluntary participation representing more than 90 percent of the tonnage in North America and with members in 14 nations.

The vegetables we supply to consumers along with other horticultural crops are called "minor". However, in total, horticultural crops constitute a large part of our diet and they account for most of our vitamin C and vitamin A intake. Homemakers today are conscious of what constitutes a healthy diet, and make purchases accordingly.

Many small to medium sized growing and processing operations are involved. These crops do not compare to the commodity crops, but they provide a useful diversity to the overall farm income picture. The farm value of these crops generated 5.1 billion dollars in 1992. More than 750,000 tons of pickled cucumbers are consumed each year in the U.S.A. alone. The processing of pickled onions, peppers, cauliflower and other "minor" horticultural crops provides cash income to growers and jobs in processing plants and related supply industries.

The pickled vegetable industry strongly supports and encourages your Committee in its work of maintaining and guiding the Agricultural Research Service. You have kindly

indulged our group allowing us to show our support each year for more than twenty five years.

U.S. FOOD FERMENTATION LABORATORY, RALEIGH, N.C.

The U. S. Food Fermentation Laboratory, USDA-ARS, is located on the campus of North Carolina State University. It is the only public laboratory in the country dedicated exclusively to research on the preservation of vegetables by fermentation or direct acidification. The research of this laboratory has benefited the farmer, processor and consumer for many years; this research has contributed to the evolution of our industry in terms of new and safer processing methods, new and improved products and reduced wastes.

Just as important as the research itself, your funding commitment to ARS/USDA research, allows the laboratory to maintain its competency and it's international reputation in fermented vegetable research. We believe that a value added higher technology approach will help in the long term solution to the problems of the farm industry and provide a very stable base for yet unknown demands of future generations.

Our industry looks to this laboratory for the basic research needed to create new and improved methods for preserving the various produce commodities mentioned earlier. We have adopted many of the research findings of the laboratory, some of which have had great economic benefits. The industry currently provides financial support for a vegetable fermentation pilot plant which is located on the premises of one of our member companies for use by personnel of the U.S. Food Fermentation Laboratory in their research.

This year we are asking that you consider raising the funding of the laboratory to a sufficiently high level to address some critical problems and to create new processing methods that will increase the competitiveness of our industry in national and international markets.

The problems of current and urgent concern relate to the safety of our fermented products because of strict chloride limits for wastewaters that are discharged into freshwater bodies. Our current technology for brined cucumbers results in excessive use of salt to prevent microbial spoilage. Fundamental research by the U.S. Food Fermentation Laboratory has revealed spoilage by bacteria which is of possible public health significance (Clostridium) when cucumbers are stored in bulk tanks at levels of salt that

would preclude disposal problems. However, current research has revealed possible new approaches to resolve this problem, but continuing research is needed to assure safe products of high quality to the consumer.

Another problem related to food safety has to do with the possible growth of food pathogens, such as Listeria, in lightly acidified or non-acidified vegetable products that are stored under refrigeration. In an attempt to meet changing consumer demands, we recognize the possibility of Listeria problems in some of these products (Listeria bacterium has been found to occur in coleslaw).

A full-time scientist in the area of Microbial Ecology is urgently needed to do research to assure safety of pickled vegetables. This urgency is due to the stricter regulatory guidelines for chloride disposal, as cited by the above, and the current demand of consumers for more lightly acidified products.

To round out the current team of competent scientists, a Bio-Engineer is needed. This scientist will be responsible for conceptualizing the improved design of vessels for vegetable fermentation, and for contributing engineering expertise for new and improved processing methods.

Furthermore, it is time to review the critical funding situation that exists at the U.S. Food Fermentation Laboratory which we explain as follows based on our information and estimates:

There are three scientists employed at the Scientist Year basis, Dr. Fleming, Research Leader, Dr. McFeeters and Dr. Breidt working on pickled vegetables.

The Food Fermentation Laboratory is currently funded at the level of $463,000.00 per year. A figure used by ARS/USDA to employ one scientist with salary, benefits, operating funds and all overhead is about $250,000 per year. This is referred to as one Scientist Year, or SY for short. Only a small portion of this is salary, administrative "skim" comes off the top.

Food Fermentation Laboratory, Raleigh, North Carolina

WHAT IS NEEDED:

Scientists Needed	Current Status	Funds Needed
Food Technologist	Active	$ 250,000.00
Biochemist	Active	250,000.00
Microbial Geneticist	Active	250,000.00
Microbial Ecologist	*Needed*	250,000.00
Bio-Engineer	*Needed*	250,000.00

TOTAL FUNDING REQUIRED		$1,250,000.00
CURRENT FUNDING		463,000.00
ADDITIONAL FUNDING NEEDED		**$787,000.00**

It is essential that every effort be made to correct this funding short fall in as short a time span as possible because of immediate and recurring emergency situations facing growers and processors.

CROPS RESEARCH LABORATORY, MADISON, WISCONSIN

For ongoing research to progress, an additional $415,000.00 is requested for the ARS Crops Research Laboratory at the University of Wisconsin. A separate situation exists in this lab where remarkable progress is being made on onion, carrot and pickle development. For example, researchers in this lab have found that in cucumber, a naturally-occurring innocuous bacterium can be applied to protect harvested fruit from rotting; DNA markers can be used to identify plants with natural resistance to serious pests; and by using a rare cucumber from Asia it may be possible to develop pickles with orange color and enhanced nutritional value for U.S. production. These investigations have widened the scope of opportunities. These are the long term research efforts by this laboratory which would not have been pursued by the industry, yet valuable cucumber genetic stocks have resulted and supplied to the United States pickling industry. Permanent funding is necessary to solve problems requiring several years of testing, where genetics and breeding research is involved. These are the research areas where we believe significant contributions to agriculture can be made with the addition of a permanent increase in the base funding. Such an addition would allow this laboratory to more adequately perform both the much needed germplasm development and the research underpinning the plant breeding efforts.

ARS Administration at the National Program Staff and Area level has been very helpful

in providing short term funds, but permanent funding is needed for research projects to provide the vegetable industry the needed germplasm to remain competitive in the United States and other nations.

Horticultural crops contribute significantly to our dietary vitamin A and Vitamin C. Approximately 35% of the cucumber, 60% of carrot, 30% of onion and 90% of garlic research effort in the U.S. public sector is carried out by the USDA, ARS program at Madison, Wisconsin. Research performed by past and current members of this program has yielded pickling cucumbers with resistance to several diseases; carrots with improved marketable yield, color, flavor, and disease resistance; onions with excellent storage ability, yield, and disease resistances and the first garlic in the United States from true seed. In order to capitalize on the investment and expertise, additional funding is vital. To sustain this effort $415,000.00 is requested. With this additional base funding, vegetable improvements using classical breeding techniques and modern biotechnology methods can be combined and applied in the development of dramatic new plant types that supply more nutrition, have greater disease and insect resistance (less pesticides applied), and are more adaptable to changing growing environments.

Vegetable Crops Research Laboratory, Madison, Wisconsin

3 Scientists	
Current Funding	$335,000.00
Necessary Additional Funds	$415,000.00

The economic benefits resulting from the proposed funding increases will continue to greatly exceed the budgetary costs of both locations while benefiting the farmers, processors and consumers.

Thank you for your consideration of these needs and your expression of support for the ARS/USDA.

AGRICULTURAL RESEARCH

WITNESS

RICHARD SMITH, PRESIDENT, NATIONAL KRAUT PACKERS ASSOCIATION

Mr. SKEEN. Let us take Richard Smith and then I will go vote. We have a series of votes so I think we have two more.

Welcome. I appreciate your comments and we will try to keep you from having to sit here and wait while we run through this series of votes. It is liable to be a protracted voting period.

Go ahead.

Mr. RICHARD SMITH. Thank you very much, Mr. Chairman.

I am Richard Smith and I would like to thank you for allowing me to present testimony to the needs of the National Agricultural Research Service. As president of the National Kraut Packers Association and a family owned food processing company, I represent the sauerkraut industry in America.

The importance of the USDA Fermentation Laboratory located on the North Carolina State University campus to the sauerkraut marketing and manufacturing industry in America cannot be overstated. This ARS lab is considered to be the United States food fermentation lab and, because of its reputation for accomplishments, it is recognized in many parts of the world.

Funding from our organization, the National Kraut Packers Association, and donation of commercial equipment and test sites to this USDA lab has allowed these researchers to continue work in areas which are of particular concern, use of specifically selected bacterial starter cultures, use of less salt to make a safe and stable product for the consumer, use of special fermentation tank methods to provide long term solution in disposing of effluents to the environment.

We understand the U.S. Food Fermentation Lab is currently funded at the level of approximately $463,000 per year. The work is directed to solving fundamental problems in all pickled vegetables.

A figure used by ARS USDA to employ one scientist with salary, perks and overhead is now $250,000 per year. This is referred to as one scientist year. Only a small portion of this is salary, the rest is administrative skim.

Funding to bring the lab to a support appropriate for five scientist years would be $1,250,000. Current funding is approximately $463,000. Additional funding needed is $787,000.

Our written testimony has been submitted and I want to thank you for the opportunity to appear before your committee and explain our progress and our industry's need.

Mr. SKEEN. Thank you very much. We appreciate the testimony and the total text will be entered in the record.

Mr. RICHARD SMITH. Thank you, Mr. Chairman.

Mr. SKEEN. Thank you very much.

I am going to go vote and will be back as quick as I can.

[Recess.]

[The information follows:]

A STATEMENT OF CONCERN FOR SUSTAINED
AND INCREASED RESEARCH BY THE
AGRICULTURAL RESEARCH SERVICE/USDA
AND in particular for the:

U. S. Food Fermentation Laboratory, ARS/USDA
Department of Food Science
North Carolina State University
Raleigh, North Carolina

Research Leader:
Dr. Henry P. Fleming

Principal Witness: Mr. Richard Smith, President,
National Kraut Packers Association
(The Fremont Company, Fremont, Ohio)

ON THE OCCASION OF Hearing March 31, 1993, U. S. House Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies.

Your courtesy in allowing us to appear and present testimony at this Hearing is deeply appreciated. We thank the committee for their attention to the needs of the Agricultural Research Service.

The Sauerkraut Industry is solidly behind the research strategies set down by the Laboratory in our behalf to assist growers and processors in developing new methodology and techniques needed to continually improve our product. A sustained commitment is required for fundamental research to ever have practical application. The Agricultural Research Service of U.S. Department of Agriculture is a vital tool in this effort.

Last year members of the National Kraut Packers Association donated a cabbage coring machine and a slicer to the Food Fermentation Lab in Raleigh, North Carolina, to further enhance the work done by Dr. Fleming. This year the association agreed to set up pilot plant studies at a member company's plant in Wisconsin. This is another indication of our commitment to future improvements in cabbage fermentation work being carried

out at the Raleigh, N.C. laboratory.

Consumption of sauerkraut in currently believed to be at 1.5 pounds per capita per year. Consumers are much more aware of the benefits our product brings to the family dinner table. Sauerkraut is a source of fiber, minerals and contains vitamin C. It has also been shown that eating vegetables from the Cabbage family appears to reduce the risk of some forms of cancer.

Although the U. S. Food Fermentation Laboratory, ARS/USDA is located on the campus of North Carolina State University, it is serving the needs of the growers, processors and consumers of the entire United States and because of its reputation of accomplishments is recognized now in many parts of the world.

This ARS Laboratory, in a few short years, has provided practical applications for packers in major producing states in the North Central and Eastern regions. The newly developed system of topping kraut juice tanks with nitrogen heads keeps this useful food from being put into waste lagoons and allows the Vitamin C content to be preserved and used. Flexible tank covers continue to be refined, increasing the amount of usable sauerkraut further. Research on the use of specially selected bacterial starter cultures may lead to a further reduction in waste. Research on processing cabbage using less salt than current industry standards for safe and stable shelf life is another area of work that will take considerable effort before practical processes and products can be made available to the industry and consumer respectively.

Of particular emergency concern is the continuing pressure arising from the State and Federal EPA establishment of water quality levels with low chloride limits. The sauerkraut industry feels the long term solution will be found in the manufacturing portion of the process used to make sauerkraut, making the disposal of effluents much safer for the environment. Any change in processing methods must incorporate controls for safety of products for consumer consumption and be economically feasible for the processor.

A priority of assignment to overcome these environmental issues puts the commitment for one Microbial Ecologist, at the top of the list. We implore your concern for this need. Preliminary investigations indicate that with the skills of a Microbial Ecologist applied to these environmental problems and food safety, the answers can be found and implemented in practical commercial processing. The scientific skills required are beyond the abilities of the processing industry itself and a cooperative effort is the most likely solution to solving these concerns. Additionally, a Bio-engineer should be employed to round out this team. A Bio-engineer would be responsible for conceptualizing improved designs for fermentation, handling and processing techniques and methods.

The work at this laboratory also operates with Cooperative Memorandum Agreements with the Pickle Packers International, Inc. and the National Kraut Packers Association, Inc. for industry funding. National Kraut Packers helps to support a graduate student in the Food Fermenting Laboratory though funding efforts

supported by association members.

We understand the U.S. Food Fermentation Laboratory is currently funded at the level of approximately $463,000 per year. The work is directed to solving fundamental problems in all pickled vegetables.

A critical funding situation exists at this laboratory and can be explained as follows:

A figure used by ARS/USDA to employ one scientist with salary, perks and overhead is now $250,000.00 per year. This is referred to as one Scientist Year, or SY for short. Only a small portion of this is salary. Administrative "skim" comes off the top.

There are three scientists employed at the Scientist Year basis working on pickled vegetables, Dr. Fleming, Research Leader; Dr. McFeeters, and Dr. Breidt.
WHAT IS NEEDED:

Funding to bring the laboratory to a support appropriate for five Scientist Years	$1,250,000.00
Current funding level	463,000.00
Additional Funding Needed	$ 787,000.00

It is essential that every effort be made to correct this funding short fall in as short a time span as possible because of the immediate and recurring emergency situation facing growers and processors.

Thank you for the opportunity to appear before your Committee to explain our progress and our industry's needs.

FOOD SCIENCE RESEARCH

WITNESSES

GRADY CHISM, PROFESSOR OF FOOD SCIENCE, THE OHIO STATE UNIVERSITY

CHARLES WIXON, DIRECTOR OF PUBLIC AFFIARS, INSTITUTE OF FOOD TECHNOLOGISTS

Mr. SKEEN. Dr. Grady Chism? Charles Wixon?

Nice to have you here. Thank you for waiting.

Mr. CHISM. Thank you for having us.

Mr. SKEEN. Sorry about the little hiatus.

Mr. CHISM. Well, that is quite all right. I realize you saved the best for last and I am glad to be in that position.

Mr. SKEEN. Yes, sir. By your own admission, we will take that as a fact.

Mr. CHISM. Right. Okay.

Congressman Skeen, I am very happy to be here today and to have the opportunity to testify on issues that are important to food processors and to consumers.

I am Grady Chism, Professor of Food Science at the Ohio State University and I have been on the faculty there for 18 years doing research in food science. With me is Charles Wixom, Director of Public Affairs for the Institute of Food Technologists.

I have submitted a written statement and request that it be inserted into the record.

I am representing the Institute of Food Technologists, a 26,000-member scientific society dedicated to providing consumers with a nutritious, safe food supply. In addition to food scientists, our members span disciplines from chemistry, microbiology and nutrition to engineering, toxicology and biotechnology.

The Institute of Food Technologists published in March a 1993 update for the country's most pressing needs in food science research. The priority areas this identified are food safety; diet, nutrition and health; biotechnology; the environment; the molecular basis of food functionality and food processing and packaging.

I have a copy of this report which exceeded our five pages and I would like to offer it to you for your consideration should you might want to enter it.

Mr. SKEEN. Thank you, Doctor.

Mr. CHISM. Okay. Thank you.

The American food supply is noted for its safety, nutrition, variety and affordability. This reputation is a direct result of food and agricultural research.

We urge full funding of the National Research Initiative at the $480 million level. We believe that sustaining adequate research is essential for ensuring the safety and quality of food and adding value to agricultural commodities.

An example or two of this is where research is reported which has shown its value. Recently we have been reminded of how deadly E. coli 0157:H7 can be. Ten years ago, scientists studying the characteristics of the genetic material of this organism discovered that they could separate the pathogenic organisms, those which caused disease, from the non-pathogenic organisms.

Today, we are doing similar sort of research for Lysteria monocytogenes, another important pathogen. The ability to separate the disease causing organisms from those that do not cause disease provides us great opportunities to do proper regulation and to avoid condemning products which are contaminated with organisms which are not harmful.

Only research will provide the tools to rapidly monitor foods for disease causing microorganisms and to allow us to distinguish these from the ones that do not cause disease.

The benefits of adequate funding for food science research can be fully justified by improved public health alone. Additional benefits include value added to farm products, increased markets for agricultural output, enhanced competitiveness in world markets, employment in the food processing sector. It is an investment that we cannot afford to do without.

Thank you.

Mr. SKEEN. Thank you, Doctor. We appreciate the work that you do in this very important field and particularly of interest is the statement that you made relative to E. coli. That has been a very interesting advent in the research and I think it is very timely.

Thank you for your testimony.

Mr. CHISM. You are welcome.

Mr. SKEEN. We appreciate your being here.

[The information follows:]

Testimony of the Institute of Food Technologists
before the
Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies

Subcommittee on Appropriations
Chairman, Representative Richard J. Durbin (D-IL)

March 31, 1993

Chairman Durbin and Honorable Members of the Subcommittee: Thank you for this opportunity to testify on issues important to the food producers and consumers of this country. I am Grady Chism, Professor of Food Science at The Ohio State University. I have been on the faculty of The Ohio State University for 18 years, teaching and conducting food science research, specializing in the biochemistry of foods. With me is Charles Wixom, Director of Public Affairs for the Institute of Food Technologists.

I am representing the Institute of Food Technologists, a 26,000-member scientific society of food scientists and technologists dedicated to satisfying human needs for nutritious, safe food. In addition to food science, our members span disciplines from microbiology, chemistry, and nutrition to engineering, toxicology, and biotechnology.

America's food supply is noted for its safety, nutrition, variety and affordability. It is less well recognized that the quality, safety and economic advantage of our food system are the direct result of the scientific research that underlies our plant breeding and harvesting technology, our food processing and handling methods, and our preservation and packaging systems. Research enables the development of new products designed to meet consumer demands for improved nutrition, convenience and safety. We believe that sustaining adequate research in food science is essential for ensuring the safety and quality of food and adding value to agricultural products. And, as the country's largest manufacturing business and the primary means of adding value to agricultural commodities, the food system depends on developments in food science research to remain innovative, competitive, and economically vigorous.

Some examples of the results of food science research illustrate the importance of this research effort. Food science research has been directly responsible for elucidating the conditions for safely processing low acid canned foods. Thus, we consume canned fish and mushrooms without fear of poisoning from *Clostridium botulinum*. More recent research has brought us modified atmosphere packaging and fat replacers.

We have been recently reminded how deadly *E. coli O157:H7* can be. It was work with this microorganism some ten years ago, however, that revealed certain characteristics in the genome of the bacterium which made the organism pathogenic. Research with *E. coli O157:H7* enabled scientists to distinguish harmful from innocent strains of *E. coli*. Today, researchers are using the same approach to study the virulence factors in different strains of the bacteria, *Listeria monocytogenes*. We still do not know, for example, how to distinguish the types of *Listeria* that cause disease from those that are harmless. As a result, food processors must achieve a zero tolerance level for all types of this organism, many of which are harmless. Only research will provide the tools needed to monitor foods for harmful organisms without worrying about harmless ones.

An impediment in controlling *Listeria monocytogenes* is the length of time required to assay for these organisms. Standard microbiological culture methods take as long as two weeks to positively identify the organism. Intensive research efforts are striving to develop methods that will produce accurate results in a matter of hours. Many more such rapid detection methods for microorganisms are needed to facilitate the microbiological monitoring of foods.

The need for better detection methods for foodborne pathogens and toxins extends to virtually all disease-causing agents. We need methods that are quicker, more sensitive and economic as alternatives to traditional culture procedures. Such methods will facilitate the design and implementation of Hazard Analysis Critical Control Point (HACCP) strategies for improving food safety.

Fundamental research on food components allows food scientists to develop new food products specifically tailored to meet dietary recommendations. For example, breakfast cereals have been created which supply higher levels of dietary fiber than traditional formulations along with essential nutrients and appealing flavor. Such products make it easier for people to increase their dietary fiber intake without modifying their customary food habits.

Similarly, food scientists have developed a variety of fat replacers suitable for a wide range of food products. Such ingredients can be used to replace fat in food while retaining some of the desirable attributes of fat such as mouth feel and flavor. These ingredients have been adapted for foods ranging from frozen desserts and chilled products to baked goods. There is a need, however, for a far greater understanding of the contributions of food ingredients to flavor, texture, stability, etc., if we are to develop foods tailored to assist consumers in meeting the dietary recommendations that will ultimately reduce the incidence and severity of diet-related chronic diseases. These "tailored" foods will only be effective in preventive health strategies if they satisfy consumers' desires for quality, palatability, safety, and cost.

Research into the formulation of foods has enabled food scientists to prepare foods that can be stored safely at room temperature without excessive processing. An example is cheese spread. By using scientific principles to create conditions that prevent spoilage yet retain palatability, foods can be made more convenient yet safe under a wide range of storage conditions. Reducing the need for refrigeration presents enormous potential to develop new foods and new markets. Achieving this potential depends on developments in food science research.

Better understanding of the relationships between foods and food components and the development of chronic disease is needed if we are to more fully benefit from wise food choices and new product development. More effective strategies for reducing obesity have enormous potential for improving health and reducing health care costs. Modifying the fatty acid composition of widely consumed foods can contribute to a reduction in saturated fatty acid intake, an action widely recommended to improve heart health. Similarly, improved consumption of anti-oxidant vitamins and calcium may have a substantial impact on the development of chronic disease, ultimately reducing time lost from work and eventual health care costs.

Food science research has expanded enormously in the area of biotechnology. Advances in methods of genetic modification have the potential for improved foods and ingredients from plants and microorganisms. Scarce ingredients may become more available; more reliable and productive microorganisms used in fermentation and food processing can be developed; enzymes important in ingredient production can be adapted and produced economically; diagnostic tools for the detection of disease-causing organisms can be developed.

In addition to improving the quality of the food supply, food science research is the basis for adding value to agricultural commodities. Thus, wheat becomes bread, spaghetti, and cookies; milk becomes cheese and yogurt; meat becomes bacon and ham; vegetables become soup, etc. Value added to agricultural products through food processing is the nation's third greatest source of economic value, according to Dr. John Connor, agricultural economist at Purdue University. This immense economic sector is estimated to be worth nearly $129 billion to America's economy.

The importance of America's food science research has been recently emphasized. The Institute of Food Technologists published in the March issue of *Food Technology* its 1993 update on the country's most pressing needs in food science research. Prepared by six teams of leading food scientists, the report identified six priority research areas: food safety; diet, nutrition, and health; biotechnology; the environment; the molecular basis of food functionality; and engineering, food processing, and packaging. Food science research in these areas expands the knowledge needed to develop the technologies to maintain and improve the food supply. Shortfalls in funding research not only set back food product and technology

applications that depend on research, but also erode America's competitive position in the global food market. There is ample evidence of our declining position in food manufacturing equipment and technology. Research is the only way to reverse this trend.

We recognize that the present economic realities likely preclude additional research funds. We urge, however, full funding for the National Research Initiatives on Agriculture, Food, and Environment, administered by USDA. This competitive grants program includes funding for food science research. Agriculture Secretary Espy has suggested funding the NRI at $480 million within the next five years, an objective we applaud. We further urge that the resources devoted to the program areas in the NRI for "nutrition, food quality and health," and "processing antecedent to adding value and developing new products," the segments directly concerned with food science research, be instituted immediately at the level envisioned for the fully funded program.

Benefits of adequately supported food science research can be fully justified by improved public health from greater food safety alone. In addition, food science research contributes to a better understanding of the relationship between foods and health. This, in turn, can foster more effective health promotion and disease prevention. Food science research contributes directly to improved technologies for food processing with fewer adverse effects on the environment. Finally, food science research benefits the economy through innovative new product development, value added to agricultural commodities, expanded markets for farm output, and employment. It is an investment we cannot do without.

AMERICA'S FOOD RESEARCH NEEDS: INTO THE 21ST CENTU'
A report of the Research Committee of the Institute of Food Techr

Despite its enormous impact on the nation's health and economy, funding for basic research in food science and the knowledge base in these fields defines the future. IFT has identified the following six areas of critical needs research. Bolstered investment in these areas would help resolve pressing food-related health, safety, environr Priority research goals are:

FOOD SAFETY

Food pathogens cause hundreds of deaths, 6 to 80 million illnesses, and at least $5 billion in health care costs each year in the Unite.

Research Needs

1. DETERMINE the true causes and impact of foodborne disease in the U.S. 2. DEVELOP better testing methods for microbiological contaminants and disease agents. 3. DEVISE more effective food sanitation and pathogen control methods.

Benefits

1. To understand and further reduce causes of foodborne diseases. 2. To minimize the spread of harmful pathogens in foods.

DIET, NUTRITION AND HEALTH

Poor eating and inferior nutrition knowledge are believed to contribute greatly to grave illness and premature deaths in the U.S., vastly increasing health care costs.

Research Needs

1. IDENTIFY the role of foods and their nutrients in health promotion and disease prevention. 2. DETERMINE nutrient requirements during critical stages of human life (infancy, youth, pregnancy, advanced age, illness). 3. DEFINE the role of nutrient and dietary components in genetic regulation.

Benefits

1. To better understand the benefit of reduced-calorie foods and the role of exercise. 2. To know better what diet we should follow during these critical life stages. 3. To inform us how particular nutrients (e.g. fat) affect the genes that control life processes.

BIOTECHNOLOGY

This threshold science holds great potential to improve existing and develop new, better food products that could meet health-related needs and improve the world market position of the U.S.

Research Needs

1. IDENTIFY genes, define transfer systems, and develop and optimize gene expression systems in plants, animals and microbes important in the food supply. 2. STUDY the structure/function relationships of enzymes. 3. STUDY interactional properties of non-enzyme food macro-molecules (proteins, carbohydrates and lipids), to predict and control important food components.

Benefits

1. To tailor foods more closely to reflect market and health-related demands. 2. To provide tools to enhance other food science advances, e.g. in food safety, waste control. 3. To provide new or improved foods and food ingredients.

ENVIRONMENTAL ISSUES

Research could lead to a substantial reduction in and recovery and use of the by-products of food processing.

Research Needs

1. CHARACTERIZE by-products, wastes and air emissions generated at all stages of food processing. 2. DEVISE means to reduce the quantity of by-products. 3. DEVELOP rapid analytical methods, for raw to finished products and by-products, to determine the presence of desirable and undesirable substances.

Benefits

1. To understand better the components of food processing by-products and sources. 2. To reduce releases and emissions to the environment.

MOLECULAR BASIS OF FOOD FUNCTIONALITY

Fundamental knowledge of the chemistry of foods underlies the creation of new or improved foods from commodities.

Research Needs

1. DEVELOP improved techniques for characterizing foods at the molecular level. 2. DEVELOP state diagrams and explanations of these. 3. DEVELOP models to predict the physical properties of food biopolymers from molecular architecture.

Benefits

1. To produce in-line sensors to monitor food quality during production. 2. To better predict a finished product, resulting in less expensive foods of higher quality. 3. To expedite the introduction of advanced technologies into food production.

ENGINEERING, PROCESSING AND PACKAGING

Making food production more efficient can reduce costs and waste and improve the U.S. competitive position.

Research Needs

1. QUANTIFY physical, chemical and transport properties of food, related materials and processes. 2. ENHANCE the safety of existing and new technologies. 3. DEVISE and use sensors, monitoring systems and controls.

Benefits

1. To develop information databanks to improve our understanding and control of food manufacturing operations. 2. To develop new and improved value-added products for national and international markets using new technologies. 3. To make food processing systems safer, more efficient and environmentally benign.

Who benefits?

CONSUMERS, who will continue to enjoy a safe, nutritious and abundant food supply that meets their evolving needs; the **ENVIRONMENT**, by a reduction or elimination of the impact of manufacturing wastes; **FARMERS**, through increased or newly created demand for their products; **FOOD PROCESSORS AND MANUFACTURERS**, through greater U.S. competitiveness as a result of applying new technologies to familiar commodities; **WORKERS AND THE ECONOMY**, through the creation of jobs and increased U.S. competitiveness. Food is the largest industry in the United States, constituting about 20 percent of the U.S. GNP, employing fully 14 million people from farm to market, and supporting an additional 4 million jobs in related industries. Over 1.5 million people are employed in food processing alone.

March 1993 IFT, 221 N. LaSalle St., Ste. 300, Chicago, Illinois 60601 (312) 782-8424

RURAL DEVELOPMENT PROGRAMS

WITNESSES

BILL K. BREWSTER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

TOM SETH SMITH, RURAL ENTERPRISES, INC.

Mr. SKEEN There is the gentleman from Oklahoma.

Mr. BREWSTER. Four gentlemen from Oklahoma—which two are not gentlemen?

Mr. SKEEN. By god, they have ganged up on us. [Laughter.]

Welcome. Why don't you all come on up here? We will let you be the introductor.

The Honorable Bill Brewster. We are delighted to have you and my old colleague, and your new colleague here with you. We are delighted to have you.

Go ahead.

Mr. BREWSTER. Thank you, Mr. Chairman. I am certainly glad to be here today before my predecessor's committee that Wes served on for years up here. It is a pleasure to be back here.

Mr. SKEEN. He was taking care of rural America.

Mr. BREWSTER. He absolutely was and we hope to continue those efforts.

At any rate, Mr. Chairman, I am pleased today to introduce Mr. Tom Seth Smith of Rural Enterprises, Inc. and endorse his and REI's efforts to bring business related technology opportunities to rural southeastern Oklahoma.

R.E.I. has been very successful in the past at bringing economic development to this depressed area of Oklahoma. I request continuance of the United States Department of Agriculture's efforts in coordination with the Cooperative Extension Service to support entrepreneurship efforts for new business and industries in economically depressed areas of Oklahoma and the nation.

Without taking any more of your time, Mr. Chairman, I introduce to you and the subcommittee Mr. Tom Seth Smith of REI.

Mr. SKEEN. Glad to have you here, Mr. Smith. We are happy to take your testimony.

Mr. TOM SMITH. Thank you, Mr. Chairman.

Mr. SKEEN. You have been well accompanied, I will tell you that.

Mr. TOM SMITH. I sure have. I tell you what——

Mr. SKEEN. Yes. They do not do this for everybody.

Mr. TOM SMITH. I understand that. I think that is something you folks know, the folks down home know because Congressman Brewster did not receive an opponent this last time and that speaks well of his service to our district.

Mr. SKEEN. No wonder he has that benign look on his face. [Laughter.]

He deserves it.

Mr. TOM SMITH. Thank you.

Mr. SKEEN. Go ahead.

Mr. TOM SMITH. Thank you for the time. I know it is late in the day so I am going to be brief. I will leave some time for questions if you would have some.

Rural Enterprises is a model rural innovation and finance center. We are organized in four function area divisions, those of administrative, rural technologies application team, industrial development incubator efforts, and those of financial services efforts to our region.

We are governed by a 13-member board. Those are made up of citizens primarily from the third district, from every walk of life in the business community.

The rural technologies application team evaluates developments in industrial technology of over 500 federal laboratories nationwide, seeking to match clients who are prospective users with the advanced technology discoveries during evaluations. It also provides technical assistance and, in some cases, hands-on technical assistance to these small manufacturers.

The industrial incubator program provides start-up businesses a stable foundation on which to build profitable concerns.

Oklahoma is a leader in the incubator industry and we rank eighth in the U.S. in the number of incubators, currently having 19 within our state. Rural Enterprises is very active within nine of these in conjunction with our area vo-tech schools.

The financial services division packages short and long-term loans for small businesses and industry and has been designated a Small Business Administration Certified Development Company.

Since becoming a certified development company for the SBA in 1982, Rural Enterprises through its financial services division has provided technical assistance in packaging for entrepreneurs and businesses in obtaining financing of over $35 million, which through these efforts has resulted in over 2600 jobs within the area of southeast, south central Oklahoma.

Mr. Chairman, I would like to just share with you a couple of the projects that we have been able to accomplish through this effort this year.

Southern Star Foods, a poultry de-boning plant located in McAlester, Oklahoma, through working with our financial services division was able to package a total financing of $5.1 million. This particular company is currently anticipating employment of 400 persons over a three-year period and one of the unique aspects of their product is that the majority of it is scheduled to be exported to Japan and the Hong Kong markets.

Another company that we were able to assist has been that of Sundowner Trailers. They manufacture stock trailers for the horse industry within our region and this project resulted in a $2.4 million investment and expansion of the company and this company is located in a community with a population of 200, Coleman, Oklahoma in Johnson County.

Another project that would be specific to the incubator, business incubator program, is Easy Soil, a compressing potting wafer manufacturer with initial sales of $125,000 in 1989 to annual sales of over $750,000 after three years as an incubator tenant located in Idabel, Oklahoma in the extreme southeast. Fifty percent of these sales are exported in conjunction with an agreement with the DuPont Corporation.

Mr. Chairman, in addition to being a certified development company for SBA and packaging their loans, we additionally package

the EDA loans as well as we serve as an intermediary relender for the Farmers Home Administration. That is a unique pilot program that the Farmers Home has had in existence for about four years running and we were one of the initial receipts of one of those programs. We have had our program in effect for three years. We currently have $1.7 million out in small loans of no more than $150,000 per loan and we have not had a default or a foreclosure occur in that three-year portfolio.

I would like to thank the committee for this time for me to appear. We would ask though that—and, again, this is always the part where you ask for the money, right?

Mr. SKEEN. We were wondering when you were going to get to it.

Mr. TOM SMITH. When I was going to get around to that?

Our program has been supported by this committee to the tune of $433,000 for the USDA and with that continued funding this will allow us to continue these types of efforts for rural economic development in Oklahoma.

Thank you, sir.

Mr. SKEEN. We thank you, Tom. And I want to tell you that the riskiest business I know is agriculture. I have been in it for some 40 years and we like to see agriculturally associated businesses interested in increasing the cash flow through that community because that is what keeps us alive.

Mr. TOM SMITH. Absolutely.

Mr. SKEEN. And you are certainly one of the most important aspects of our entire industry. We appreciate the work that you have done and thank you for being here.

Mr. TOM SMITH. We appreciate your leadership.

Mr. SKEEN. We appreciate your testimony and we appreciate you folks for being with us.

Good to see you again, Wes.

Mr. WATKINS. Thank you. And I would just say what you do here, I am very proud of this committee and the staff. I had the opportunity of working them for about ten years or longer. I am doubly proud of my successor, Bill Brewster. He has done a marvelous job here and this is one of the programs that is helping build jobs.

I know you represent a lot of rural area, Chairman Skeen, and this area—we cannot get Dallas/Fort Worth to come over in that rural area of Oklahoma.

Mr. SKEEN. Well, you know what they call Texas, do you not? Baja, Oklahoma. [Laughter.]

Mr. WATKINS. You know, you cannot get Tulsa and Oklahoma City to come down to the service area, so this is the one entity that is being able to produce hundreds of jobs, helping to put hundreds of jobs together.

So I thank this committee for everything you are doing and I know Chairman Brewster is doing a lot of work trying to help in those areas.

Mr. TOM SMITH. The track record of REI is really excellent as far as jobs go.

Mr. SKEEN. Well, from your testimony I perceived that the loss ratio is extremely low.

Mr. TOM SMITH. It is extremely low. Their success ratio on industries that come in and stay put have been extremely good.

Mr. SKEEN. Well, that is very good news and we appreciate the work you are doing.

[The information follows:]

RURAL ENTERPRISES, INC.
TESTIMONY BEFORE THE HOUSE OF REPRESENTATIVES
AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES
SUBCOMMITTEE ON APPROPRIATIONS

March 31, 1993

SUMMARY REQUEST

Rural Enterprises, Inc., requests continuance of the United States Department of Agriculture (USDA) in coordination with the Cooperative Extension Service to support entrepreneurship efforts for new business and industries in economically depressed areas of rural Oklahoma.

The Rural Technology Applications Team evaluates development in industrial technology of over 500 federal laboratories nationwide, seeking to match clients who are prospective users with the advanced technology discovered during evaluations. It also provides technical advice and in some cases hands on technical assistance to small manufacturers.

The Industrial Incubator program provides start-up businesses a stable foundation on which to build profitable concerns. The program has created approximately 200 new jobs since its inception in 1985. Oklahoma is ranked eighth in the U.S. in numbers of incubators, with nineteen facilities, REI administers nine of these facilities.

Rural Enterprises financial services packages short and long term loans for small business and industry and is a designated **Certified Development Company** for the U.S. Small Business Administration (SBA). REI draws on local, state, federal, and private funding sources to structure loan packages best suited to clients needs. Total loan packages funded to date total over $27 million, creating 1,649 jobs.

The continuation of the $433,000 in funding from USDA and the additional $79,920 in funding through the Cooperative Extension Service (of $333,000 total funds allocated to technology transfer projects in Oklahoma and Mississippi) will allow Rural Enterprises, Inc., to continue expanding economic development efforts that USDA funds have provided since the first agreement between REI and USDA before 1987.

If we as a nation are to remain competitive, we must improve not only our ability to discover new technologies, but also our ability to get them from the laboratory to the production shop. Because small businesses in particular have the least access to new technologies, organizations such as Rural Enterprises, Inc., are crucial in filling the gap. With this committee's help in ensuring continued funding, REI will be able to help its rural clients and the United States will remain economically competitive.

Mr. Chairman, as Executive Director of Rural Enterprises, Inc., in Durant, Oklahoma, I would like to express my appreciation for the opportunity to address this committee on a matter of crucial

importance to this country's economic future assistance to small businesses and entrepreneurs in areas that make a difference in the success or failure of such entities.

Rural Enterprises, Inc., is a private non-profit (501-C3) economic development corporation established in 1980 to provide assistance to individuals and businesses to improve the economic conditions of our service area. The idea behind the formation of REI was to provide a diversity of services that were needed to develop prospective businesses and to assist existing businesses in an effort to improve the chances for survival in an economically depressed area by applying a combination of innovative economic development tools consisting of:

* Financial packaging services including SBA 504, SBA 7(a), Conventional loan guarantee program, CDBG, FmHA Business & Industry, FmHA Infrastructure, Intermediary Relending Program, OFA, and Ozarks Corporation for Innovation Development;

* Database searches of NASA/Recon unclassified databases and over 700 commercial databases; a full document ordering service; technology transfer; innovation evaluations; promotion and encouragement of innovative ideas through new product and process fairs;

* Incubator assistance; and industrial development services. USDA's assistance has enabled REI to increase efforts toward regional economic enhancement, specifically to;

* Expand the geographic area in which tenants are recruited for the twelve incubators in which REI is involved in Durant(3), Hugo, McAlester, Atoka, Bennington, Stigler, Poteau, and Idabel, and provide support services for incubator tenants and explore the feasibility of building additional incubators in the state of Oklahoma;

* Participate in the continuing New Product and Process Fairs held throughout the state, thereby encouraging the development of innovations;

* Solicit and evaluate new products and processes which may result in the establishment of single product industries or maintain the flow of new products for existing industries;

* Develop and continue an active literature program describing the services available through Rural Enterprises. This material is distributed as an outreach effort to other states, as well as within Oklahoma, to broaden economic development efforts;

* Identify and promote innovative methods of job creation and industrial development and assist community leaders in implementing the economic development programs to provide these jobs;

* Provide financial loan packaging assistance in support of job creation opportunities;

* Assist in plant expansion and manufacturing process improvement of existing small businesses;

* Provide assistance to the Oklahoma Cooperative Extension Service including technology development consultation, patent searches, technology searches, and document procurement services. Specific services that have been improved through USDA's funding and examples of assistance provided through these services include;

Industrial Incubators - Rural Enterprises' Industrial Incubator program was created in 1980 with three incubator facilities located in Atoka, Hugo, and McAlester. Since its inception, this program has expanded to include a total of nine incubator facilities in Durant, Idabel, Stigler, Bennington, and Poteau as well. Through the small businesses located in these facilities, 204 jobs were created, with 106 jobs currently retained.

Rural Enterprises Incubator program offers beginning businesses a stable foundation on which to build long-term profitable concerns. These facilities consist of buildings for the specific purpose of starting new businesses and are designed to accommodate a variety of manufacturing industries. Buildings range in size from 4,800 square feet to almost 12,000 square feet and have housed businesses such as machine shops, metal fabrication companies, electronic assembly, and biomedical engineering firms.

J & S Manufacturing is a new tenant in the Kiamichi Area Vo-Tech-Durant incubator. The industry located in the facility in May 1992 and specializes in custom machining, lathe work, mill work and surface grinding. Current employees are the two principals, Sammy and Joe Brown. J & S received work from Oscar Meyer as the result of an REI assisted direct mail promotion to area manufacturers.

Taloka Woods, Inc., located in the Kiamichi Area Vo-Tech in Stigler in December 1992. Taloka woods manufactures aromatic cedar gift products and employs four persons. The industry's product line includes uniquely designed jewelry boxes and a stackable shoe rack.

Financial Services - Since becoming a Certified Development Company for the U.S. Small Business Administration in 1982, Rural Enterprises' Financial Services Division has provided technical assistance to entrepreneurs and businesses in obtaining financing totaling over $35 million. Through the businesses assisted, over 2600 jobs have been created and/or retained in Southeast and South Central Oklahoma.

One company which has received assistance through Rural Enterprises' Financial Services Division is a poultry de-boning plant which exports their product to foreign countries, such as Japan and Hong Kong. Rural Enterprises assisted in obtaining

financing in excess of $5.1 million for the start up of the company. Today, the company is a major employer in it's community, employing over 200 people, with anticipation of employing up to 400 people.

Another company which has been assisted is a manufacturer of stock trailers for the horse industry. Through Rural Enterprises' assistance in obtaining financing for this company, they were able to add 55 jobs to its current 165.

Technology Transfer - The Rural Technology Applications Team of Rural Enterprises is comprised of REI staff which has industrial and technology transfer experience. The applications team serves as an intermediary between the research scientists and private business. They provide the technical expertise necessary to help define problems and provide assistance to private industry in identifying and applying technology. This assistance is essential to small businesses who are usually oriented toward production and marketing but lack research and development capabilities.

All REI divisions support the Cooperative Extension Service Technology Transfer Agent, who in turn performs outreach services that compliment REI functions. REI staff and the Extension Agent have conducted technology transfer training seminars for county extension agents. On a recent project a manufacturing problem was identified by the OCES Technology Transfer Agent. He received technical literature from CIAC and engineering assistance from the Technology Development Division. The contact led to a related project which was assigned to an OSU student design team and successfully completed in April 1992.

AGRICULTURAL RESEARCH

WITNESS

HON. BART GORDON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. SKEEN. We have the Honorable Bart Gordon from Tennessee. Glad to have you here, Bart. We have been waiting all day for you.

Mr. GORDON. Well, I know. And I am the Subcommittee's last witness.

Mr. SKEEN. You are the clean-up batter.

Mr. GORDON. I will let you go home here shortly. And I guess to make things even more brief, I will ask permission to allow my testimony to be placed in the record.

Mr. SKEEN. Granted and appreciated.

Mr. GORDON. And relieved.

Mr. SKEEN. Continue to go on.

Mr. GORDON. All right. Thank you. Thank you.

I come before you today with three requests, the first being a satellite uplink project which is a joint proposal between Stenny Hoyer and myself. Basically what this Project does, is it sets up a fiber optic link between the USDA and the National Agricultural Library as well as a downlink at the National Agricultural Library that would allow those facilities then to link up and basically bring together all the agricultural research and information around the country and make all of this information available to the AG-SAT network around the nation.

Additionally, I would request that MTSU, Middle Tennessee State University, which is in my hometown of Murfreesboro, also be included with an uplink and a downlink to be brought into this communication system.

The total funding for linking the National Agricultural Library, the USDA and all the universities, including Middle Tennessee State University, is $480,000.

This was brought to your Subcommittee last year. There was a request that the Agricultural Library give it consideration and hopefully this year you can make that a part of your committee funding recommendation.

Mr. SKEEN. We will do our very best. We appreciate it because this is the leading edge of the technology and which is making this world very competitive. And this business of agriculture keeping up with the fiber optic networking and transmission is absolutely imperative. We appreciate the work that you are doing.

Mr. GORDON. And it does not help us to have some information here, some more information there and a little bit more there.

Mr. SKEEN. You cannot use it.

Mr. GORDON. We need to be able to bring them all together.

Mr. SKEEN. Put it all together.

Mr. GORDON. And that is what this proposal would allow us to do. As I say, Stenny Hoyer and I would like to request that.

The other request I have for you, and I am sorry that Chairman Durbin is not here to hear this for reasons that will soon become apparent, I asking for a $300,000 federal share, a 50 percent share,

to set up a horticulture public service facility at Middle Tennessee State University.

The number one cash crop in Tennessee is tobacco and the common denominator to tobacco being grown in Tennessee is that it is normally grown on the side of a hillside on poor land in poor parts of the country that really do not have many other crop options. It is the major cash crop for a lot of low- and middle-income folks. It takes a lot of handwork to be able to plant, grow and harvest a crop.

Mr. SKEEN. Labor intensive.

Mr. GORDON. Very labor intensive. And so what we are trying to do is to find some alternative for these folks. Fruits, vegetables, and ornamental horticulture are almost a perfect match to go into these same kind of hillside farms that are also labor intensive and can be good cash crops. But our farmers need to know about this, they need to know how to do it. And we feel that this research center would be a good opportunity for that to occur.

Last year this subcommittee asked that the USDA make a report on this project. It should be done by May 1st and so all I am doing is laying this on the table, asking you that if the USDA comes back with a positive recommendation that you then hopefully can feel that you can fund this project.

The final proposal in really the same keeping with this looking for alternative types of agriculture in our area would be for a horse science research center. We all are very familiar with the Tennessee Walking Horse but the horse industry goes much further than that in Tennessee.

We have had a horse science program at Middle Tennessee since 1966 and it is a good program but it has not had the opportunity to be able to expand. We think there are a number of areas in which that could be done. It could be done productively as an alternative type of agriculture.

I am only asking that in report language that you ask USDA to make a report on this and we will take a look and see whether or not that could be worthwhile, too.

Mr. SKEEN. We will have that included.

Mr. GORDON. Thank you very much.

Mr. DURBIN. We thank you, Bart. We appreciate you being here.

If there is no further business, the subcommittee is adjourned.

[The information follows:]

TESTIMONY OF THE HONORABLE BART GORDON

BEFORE THE APPROPRIATIONS SUBCOMMITTEE ON

RURAL DEVELOPMENT, AGRICULTURE AND RELATED AGENCIES

MEMBERS' DAY TESTIMONY

March 31, 1993

Mr. Chairman, I would like to thank you for allowing me the opportunity to testify before you and the subcommittee today. I am interested in securing funding for three projects, two in the Cooperative State Research Service and one in the Agriculture Research Service.

The first proposal is a joint project between Congressman Steny Hoyer and myself. We are interested in obtaining **funding from USDA's Agriculture Research Service for a demonstration project which will benefit the USDA's National Agricultural Library and Middle Tennessee State University (MTSU). The cost of the demonstration project is $480,000.**

The general concept of our project is to provide MTSU's agriculture department and Middle Tennessee farmers with access to the most up to date research and agriculture-related information through state of the art technology, and expand the National Agricultural Library's ability to provide information to academic institutions and the general public.

Specifically, we would like to establish satellite uplink and downlink capabilities at MTSU and downlink capabilities and a fiber optic link at the National Agriculture Library. In an effort to better utilize the existing satellite uplink capabilities already operational at the Office of Public Affairs in the USDA's South building, our proposal calls for a fiber optic information link to be established between the National Agriculture Library and the USDA's Office of Public Affairs production facility. The demonstration project will facilitate MTSU's ability to access the most up to date agriculture research and information for experimentation and instructional purposes from the National Agricultural Library and other USDA Departments. The demonstration project will at the same time expand the National Agriculture Library's ability to provide information from its comprehensive collection of agriculture research data and information.

The USDA presently provides valuable information to academic institutions and farmers throughout the country, but the National Agricultural Library lacks the technical capabilty to electronically offer its full range of services to the Office of Public Affairs for satellite distribution. Communication via satellite technology is increasingly prevalent in the business and academic communities.

The Office of Public Affairs currently assists various USDA departments in communicating with field offices and farm groups in numerous ways. For example, the Department has produced and transmitted via satellite video programs which outline the changes included in the reauthorization of the farm bill to county extension service offices and to groups of farmers and agribusiness members. The Department has also provided experts in Washington, D.C. who participate in video teleconferencing at university symposiums and farm group meetings.

The National Agricultural Library is the nation's most comprehensive collection of bibliographies, research data and digests relating to agriculture. Our demonstration project will enable the library to provide better access to an entirely new host of users. Universities and the other departments within the USDA will benefit from increased access to the valuable information catalogued at the library.

Middle Tennessee State University has an strong, well-established agriculture program. MTSU's academic program includes a wide range of concentrations in the field of agriculture. Providing MTSU with satellite uplink and downlink capabilities will allow the university's agriculture department to access and participate in the exchange of the most up to date information allowing the students to be better educated in research methods, agribusiness pratices and production techniques.

Our demonstration project will additionally allow MTSU and the National Agricultural library to become active participants in the Agriculture Satellite Corporation (AG*SAT) programming. AG*SAT is a consortium of 37 universities across the country which share information via satellite in computer and video forms on agriculture research, methods of instruction and programming for the cooperative extension service. Our demonstration project will further facilitate the National Agricultural Library's ability to participate in the transfer of information in the AG*SAT network.

During its first year of operation, AG*SAT delivered over 300 hours of programming to over 60,000 participants. In the last year alone, AG*SAT carried over 70 short program and 3 course length college courses. Programming includes the exchange of the latest agriculture and agribusiness research information, assisting farmers and ranchers to increase profitability, exchanging timely research data and procedures among research scientists and the presentation of discussions and symposiums with the opportunity for dialogue between research facilities.

Congressman Hoyer and I believe our demonstration project will better allow the USDA to communicate with the agriculture sector of our economy and significantly benefit the agriculture research and academic programs at MTSU.

My second proposal is to **provide funding to establish a Horticulture Public Service Research and Education Center from the USDA's Agriculture Research Service for Middle Tennessee State University (MTSU)**. In last year's report, thee subcommittee directed the USDA to prepare a report on this project. It is my understanding that the USDA is very near completing the report. The **federal share of this project is $300,000.**

The purpose of the Horticulture Public Service Research and Education Center is to provide facilities which would enhance

research and instruction for agriculture students and provide area farmers with the latest in information and research related to the production of fruits, vegetables and ornamental landscape plants.

The facilities would allow students to be exposed to the entire horticulture industry. Graduates would be better prepared for careers in turf science, floriculture, nursery operations, fruit and vegetable production, greenhouse and golf course management, and landscaping, as well as closely related careers in fertility, equipment, pest control, sales, marketing, research and educational instruction.

Specifically, this second funding request calls for the construction of a public service education and research center which will include classrooms, a laboratory, work areas, storage, offices and rest rooms. The proposal calls for the improvement of the existing greenhouse. Also included is the construction of a lathhouse, a 100 feet by 42 feet greenhouse and an irrigation system for a four acre nursery.

Horticulture is one of the largest industries in the state of Tennessee. The climate of Middle Tennessee is conducive to the growing of ornamental plants, fruits and vegetables. Cash receipts from the sale of farm marketed nursery and greenhouse grown plants amounts to $165 million annually in Tennessee. The sale of fruits and vegetables from Tennessee farmers adds an additional $60 million to the Tennessee economy.

Tobacco is the number one cash crop in Tennessee. A large concentration of the state's tobacco production is grown in Middle Tennessee. One of the purposes of the horticulture public service research and education center is to provide tobacco farmers with an alternative to growing tobacco. I am interested in alternatives to growing tobacco not because I am opposed to tobacco production, but rather because nearly every time I speak with my tobacco farmers they tell me how their quotas are being reduced and how they are barely covering their costs of production. Fruits, vegetables and nursery plants are viable alternative crops because they, like tobacco, are very labor intensive and are high cash crops.

Like you, I want my farmers to stay in the business of farming. In order to better ensure this, my proposal will provide farmers with research, information and production techniques which provide them with a viable and profitable crop alternatives.

The research facility would also provide the nursery industry with access to research on the production of new and exotic plants and modern production methods. Middle Tennessee's landscaping and nursery business is growing at a tremendous rate. The opportunity exists for local farmers to produce ornamental plants which local nurseries and landscaping firms must purchase from outside the state. The research center will place an emphasis on greenhouse production and will explore various types of greenhouse designs and research the viability of various energy sources to heat and cool

greenhouses.

Mr. Chairman, upgrading the existing facilities and constructing the education and research center will significantly benefit agrculture students at MTSU and provide area farmers with the latest research and production techniques. The facility would additionally allow MTSU to conduct classes, seminars, workshops, demonstrations, and to conduct instructional, public service and specialized research to better educate students and serve the agriculture industry.

The third proposal is the development of a Horse Science Teaching and Research Center. The federal share of this project is $650,000.

The equestrian industry is very important to the state of Tennessee. The state has an estimated 180,000 horses which are valued at over $375 million. Of all the breeds represented, the Tennessee Walking Horse remains the most famous and important breed in the state. The Tennessee Walking Horse breed was officially and nationally recognized in the 1930s. Today, the Tennessee Walking Horse is one of the top ten breeds in the country with approximately 7500 foals registered annually.

Middle Tennessee State University established its Horse Science program and curriculum in 1966. The School of Agriculture presently conducts 13 horse science courses and offers a B.S. degree in Animal Science with an emphasis in Horse Science.

The original horse science program was incorporated into what is now the Tennessee Livestock Center in 1980. The Livestock Center accomodates the Tennessee livestock industry's shows, sales and other regional and national livestock events. Due to the increased use of the facility by the Center, MTSU's Horse Science program is increasingly being squeezed out of the Center.

With this project research and instruction will no longer be limited by the physical confines of a building. The proposed Horse Science Teaching and Research Center will house the entire horse science program including lecture and laboratory classrooms, riding instruction, farrier science classes and research, exercise physiology related to the training of horses and reproductive physiology relating to breeding and genetics. The facility will also contain staff offices, 20 horse stalls and an indoor riding and exercise arena allowing students and faculty to expand their experimentation and instruction projects and instruction.

Like the Horticulture Public Service Research and Education Center, the goals of this project are to create an environment where students and faculty can conduct research and experimentation which will better prepare them for a career related to horse science upon graduation. In addition, it is the University's intent to work closely with the horse industry to address particular needs through relevant research, and act as a resource to Tennessee farmers.

Thank you again for providing me the opportunity to testify here today. I would be glad to answer any questions.

THURSDAY, APRIL 1, 1993.

AGRICULTURAL RESEARCH PROGRAMS

WITNESS

HON. E. (Kika) De la GARZA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. DURBIN. Welcome to this meeting of the Appropriations Subcommittee on Agriculture and Rural Development.

We are honored to have the presence of the Chairman of the House Agriculture Committee. He is a leader in agriculture policy across the Nation. We have worked closely with him. Both Mr. Skeen and I are graduates of his educational endeavor in the Agriculture Committee.

Mr. SKEEN. By degree.

Mr. DURBIN. By degree, yes.

Mr. DURBIN. And we welcome you, Mr. Chairman. Please come and take the seat here and share with us your thoughts.

Mr. DE LA GARZA. Thank you very much, Mr. Chairman and Mr. Skeen. I appreciate your courtesy very much.

I am in a bit of an awkward situation as much as we have a requested representative from Texas A&M University, Dr. Hiler, here; and from Prairie View, which is A&M University also, General Becton, who will be here later; and then Dr. Merrifield. But of the entire A&M system, the one in my congressional district is at Kingsville. And we have Dr. Manual Ibanez, who I would like to introduce to you. And then if he might appear in whatever order you are going to call on the A&I representatives.

But this is the university that has done the bulk of the work, Mr. Chairman, on that great program, very successful program, outstanding program that you and I both have visited, our prickly pear program at A&M. Mexico is selling 20 to 30 million nopalitos of the cactus to Canada and Europe and I understand moving now into Japan.

Dr. Ibanez is the head of that university at A&I. So I commend him to you and the project or any other project that he will be speaking on. But mine is the prickly pear, the nopalitos.

And then General Becton may be speaking, I would assume and hope so, about our goat research program.

Mr. DURBIN. Mr. Chairman, if I am not mistaken, somebody sent us some goat jerky from the Kika de la Garza Goat Research Institute. Is that possible?

Mr. DE LA GARZA. You got some. Great things come from the wonderful dairy goat as well as that cactus, which is the symbol of the Americas.

Mr. DURBIN. We thought it was a cornstalk, but I will accede to you at this time.

Mr. SKEEN. We can't have a goat.

Mr. DE LA GARZA. The Great Eagle of Mexico is not sitting on a cornstalk. It sits on a cactus.

Mr. DURBIN. Mr. Chairman, thank you for joining us, and we will have your folks from your area in to testify in just one moment.

CENTER FOR SOUTHERN CROP IMPROVEMENT

WITNESS

DR. ROBERT MERRIFIELD, TEXAS A&M UNIVERSITY

Mr. DURBIN. Dr. Robert Merrifield, Texas A&M. You were introduced about an hour ago. Now you are getting a chance to testify. You got to hear a lot in the meantime, but thank you so much for joining us. We have your testimony here, Dr. Merrifield.

Mr. MERRIFIELD. Well, thank you, Mr. Chairman. I am here representing the Texas A&M University system in advocating the request for a $7 million appropriation to jointly fund the construction of a facility to house the Center for Southern Crop Improvement. Texas A&M University has approved the design of the facility and allocated over $6 million towards its construction.

The complex will include a laboratory building, controlled environment chambers, greenhouses, with appropriate containment controls. It is a center that will contribute to the rapid development and advancement of crop breeding in the U.S. and throughout the world.

The focus of its programs will be primarily on crops grown in the southern United States. We are requesting the $7 million be appropriated through the USDA Cooperative State Research Service Facilities Grants Program. Ongoing operating funds for the center will be provided by Texas A&M University and the Texas Agricultural Experiment Station.

Additional support is being solicited through grants, gifts and endowments. A year ago this subcommittee directed the USDA Cooperative State Research Service to prepare a feasibility report for this project. The study by CSRS has been completed, and I am told a report will be provided to this subcommittee. The external review panel conducted a very thorough assessment of the project, and I believe their findings will be favorable.

Advances in molecular biology have made it possible to map, identify, characterize, clone and transfer genes and living organisms. Couple this technology with crop breeding and revolutionary advances in crop improvement are possible. This is the purpose of the Center for Southern Crop Improvement.

We intend to utilize the power of molecular biology to exploit the tremendous germ plasma reservoir that are available in our plant collections. The implications of this technology are enormous.

You heard earlier from Dr. Schumacher about some of the accomplishments of the organization she represents. I can say similar things about the research programs that we conduct and will conduct in the Center for Southern Crop Improvement. The beauty of this marriage between molecular biology and crop breeding is that crop improvement processes can be achieved more quickly and

more efficiently than ever before. Bottom line of this research is to make U.S. agriculture more competitive in world markets, provide a cleaner environment, and offer the consumer a higher quality, safe food product at a reasonable price.

Now, biotechnology has had a rap in that it has been criticized for being so slow to bring products to the marketplace. What we are doing here in the center is to couple biotechnology research with a delivery system to accomplish the commercialization of improving crop varieties. The commitment to this project by Texas A&M University is manifested in the existing annual investment of $7 million in crop breeding for 12 major crops, $12 million in molecular biology research and the $8 million committed to the construction of this facility.

Mr. Chairman, I thank you for the opportunity to make this presentation.

Mr. DURBIN. Mr. Merrifield, thank you very much. We will be looking for the CSRS study and will take a close look at it. As I understand it, what you are requesting is $7 million for construction and the actual cost of operating and maintaining the facility will be borne by the university?

Mr. MERRIFIELD. That is correct.

Mr. DURBIN. It is a shame Mr. Skeen isn't here. He is quite a fan of Texas A&M. I am sure he would have a kind word. Thank you very much.

[The prepared statement follows:]

TESTIMONY IN SUPPORT OF APPROPRIATIONS FOR A FACILITY FOR THE CENTER FOR SOUTHERN CROP IMPROVEMENT AT TEXAS A&M UNIVERSITY

This is a request for $7 million in federal appropriations to jointly fund the construction of a facility to house the Center for Southern Crop Improvement. Texas A&M University has approved the design of this facility and allocated $8 million toward its construction. The complex will include a laboratory building, controlled environment chambers, and greenhouses with appropriate containment controls. It is a center that will contribute to the rapid advancement of crop breeding in the U. S. and throughout the world. The focus of its programs will be crops primarily grown in the Southern U. S. We are requesting that the $7 million be appropriated to the USDA Cooperative State Research Service Facilities Grant Program. Ongoing operating funds for the Center will be provided by Texas A&M University and the Texas Agricultural Experiment Station. Additional support is being solicited through grants, gifts and endowments.

Last year this Subcommittee directed the USDA Cooperative State Research Service to prepare a feasibility report for this project. The study by CSRS has been completed and a report will be provided to this Subcommittee. The external Review Panel conducted a very thorough study of the project and I believe that their findings will be favorable.

Crop improvement has high social and economic value.

Crop improvement through crop breeding and associated activities has high social value. This activity has steadily increased crop productivity and product quality, as well as generated new products which stimulate downstream industries. The selection of plant products with improved nutritional value and quality directly improves human health. Moreover, integrating crop breeding and genetic engineering activities with production system development and integrated pest and disease management programs help ensure an environmentally safe, sustainable agricultural industry.

New tools for crop improvement offer unlimited opportunity.

Crop improvement depends on identifying and incorporating valuable new traits into elite germplasm for use by farmers. Molecular markers (RFLP, RAPD) are being developed which will dramatically improve the efficiency of crop breeding and allow scientists to select complex traits they cannot identify with existing technology. Just as molecular markers have allowed the identification of genes for human diseases, molecular markers in crop species will pinpoint genes for plant pathogen resistance, quality, stress tolerance, maturity, etc. These genes will be tagged and monitored during crop breeding cycles. To exploit this opportunity, molecular markers, genetic maps, crop genetic databases, and specific tags for important genes need to be developed for important crops.

A primary objective of the Center is to improve southern crops.

Crop improvement depends on the quality and diversity of available germplasm. The ability to move genes into plants and specifically alter the expression of endogenous genes offers an extremely important new source of genetic diversity. Commercial bioengineering projects utilizing this technology include viral coat protein mediated virus protection, insect-resistant cotton containing BT protein, hybrid seed production facilitated through the specific expression of a foreign RNase, and anti-sense ACC synthase which prolongs shelf-life of tomato fruit. To exploit this opportunity for southern crops, transformation, selection, and propagation techniques need to be developed and accessible. Furthermore, transgenic plant production must interact with crop breeding programs, and integrated strategies for utilization must be developed.

The Center will significantly expand collaborative crop improvement programs.

Successful application of new molecular tools for crop improvement requires the integration of expertise in biotechnology, physiology, pathology, agronomy, economics, and crop breeding. Texas A&M University has a long-standing commitment and track record in the genetic improvement of crop species with major programs focused on cotton, rice, wheat, sorghum, timber and vegetables. The Texas Agricultural Experiment Station operates the largest public crop improvement program in the U.S., with more than $7 million invested annually in crop breeding and genetics. During the past 10 years, Texas A&M University and the Texas Agricultural Experiment Station have developed expertise in biotechnology, and today, the Texas Agricultural Experiment Station invests $12 million annually in biotechnology research programs at Texas A&M University and at research centers across the state. Because Texas A&M University has developed germplasm stocks, genetic resources, and related information on the physiology, pathogens, and quality aspects of cotton, sorghum, rice, wheat, trees, and vegetables, these crops will be targeted for research in the Center.

Training, education, and information services will be developed.

The Center will become a part of an existing network of crop improvement programs throughout the southern region and other adjacent regions. Programs initiated at the Center will stimulate multidisciplinary research by providing information, education and technology access. Training programs for graduate students, agricultural professionals, and international researchers will be developed. Through seminars, regional meetings, computer networks, and database development, scientists will gain knowledge and exchange information.

This partnership is a solid investment in the future of U.S. Agriculture.

The funds requested in this proposal are an investment in the development of new plant material to sustain the U.S. food and fiber supply and make U.S. agriculture more competitive in global markets. The returns represent a high dividend: economic advantage for U.S. farmers and agribusiness and high-quality, inexpensive food for U.S. consumers. The research conducted in this facility will build on existing strengths in crop breeding and take advantage of the rapidly emerging scientific field of molecular biology. It truly represents the future wave of technology advancement in crop improvement. This proposed partnership between Texas A&M University and the U.S. Government will provide a modern facility to enable this exciting program to move forward.

Thank you for the opportunity to present this proposal. I would appreciate its favorable consideration by the Committee.

MESQUITE AND PRICKLY PEAR RESEARCH

WITNESS

DR. MANUAL IBANEZ, TEXAS A&I UNIVERSITY

Mr. DURBIN. Dr. Edward Hiler and General Julius W. Becton. Let me back up. Dr. Manual Ibanez. Thank you for joining us.

Mr. IBANEZ. Thank you, Mr. Chairman. I appreciate the opportunity to be able to speak to you today. I actually belong to a university that is part of the Texas A&M system, so we would never be at odds with each other. On September 1st, as a matter of fact, we will be referred to as Texas A&M Kingsville, so we are very happy about that.

One of the major roles of our College of Agriculture is to try to find products that are well suited to the environment in which we find ourselves. Now, you have my written testimony so I won't go over that, but we are in a semi-arid area of the State of Texas in which we receive, when we are lucky, 26 inches of rainfall.

As a result, with continued irrigation to grow such crops as cotton and sorghum, what will eventually happen to our soil is, of course, that it will salt out. We are very worried about that, and while hunting leases are extremely important to the economy of our area, there are agricultural products that are also important to our area, and that is why I am here today, to ask for support of $100,000 to continue the research that we have been doing in the Opuntia cactus which Congressman de la Garza so nicely referred to earlier in his introduction of what we are doing today, and also the mesquite tree.

Now, most of you are familiar with the mesquite tree from the standpoint of the barbecue chips that are utilized in barbecuing, and for those of you that haven't had mesquite barbecue steak, let me recommend that that is the only way to have it, and this is from a boy that was born in Massachusetts and grew up in Pennsylvania, but I consider myself a native Texan. The products that we can derive from mesquite are many fold. There are food products that can be derived from the seed pods to feed cattle. Mesquite happens to be a legume that is a nitrogen fixer working in symbiosis with some of the bacteria in the soil. In the poor soil that we are dealing with, it is very well suited.

Now, there are a hundred million acres in our region of Texas that have the mesquite tree present. Considered a weed by many, it is an agricultural product because we can make the charcoal briquets, and with some of the strains that we are developing, we can also produce a very fine hardwood that will make terrific furniture, as well as floor tiles, so we would like to continue that research.

We have developed through our engineering department a mesquite harvester that is quite effective. The Opuntia cactus or the prickly pear cactus is one of those things that lots of folks like to joke about, including some people mentioning it on occasion in the Golden Fleece Award, but in fact the Opuntia prickly pear fruit is a very nutritious fruit and it could very easily become the kiwi of Texas. It is something through the development of our spineless varieties of Opuntia cactus that we think will eventually find itself

on the dinner table of every American with the proper kind of processing and with the proper kind of advertising in the same way that the kiwi fruit was developed.

But in addition to that, the Opuntia cactus can be used as cattle feed; and as well, the nopalitos, which is the leaf of the cactus, is a product again high in vitamin C, very nutritious, and can be utilized, they think, in the treatment of diabetes in some individuals. The factor in diabetes is unknown at this point, but it is related both to the roughage that is found in the leaf as well as some substance that seems to stimulate the pancreas to develop insulin. We have a number of spineless strains of Opuntia that we think can make this product both readily edible and also available to the cattle farmer so that the cactus can be eaten without first having to burn off the spines.

In any case, we have done a great deal of research in this area. We would like to be able to continue that support, and I will be very happy to answer any questions you may have.

Mr. DURBIN. Thank you very much, Dr. Ibanez. I take it that this is an ongoing project?

Mr. IBANEZ. Yes, it is.

Mr. DURBIN. How many years have you been doing research on prickly pear?

Mr. IBANEZ. Over 12 years in these two products.

Mr. DURBIN. Has it led to any commercialization of ideas or anything that we can point to specifically?

Mr. IBANEZ. Yes, sir, in the Rio Grande Valley now, the HEB Company, which is a supermarket sort of like Giant Eagle here in the East is now selling the nopalitos across the counter. We are attempting through some of the experimental farms that we have near Laredo to get the farmers interested in producing this crop because it is extremely lucrative.

The fruit itself in California is yielding something like $10,000 an acre in terms of the production of that fruit, so that would be something if we could get our farmers interested in it. It wouldn't require any irrigation, and they grow naturally there. What we are trying to do there is bring in the forms that do not have the bristles on them so that we can utilize those more readily in the market because the current prickly pear fruit that grows with the wild variety or the feral variety, as you might call it, has so many bristles that they have to be removed by hand.

Mr. DURBIN. Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman. It is Dr. Ibanez. I am delighted you are here because we raise a lot of prickly pears. The only use we could ever find for them other than puncturing tires and a few other things was feeding livestock when you burn the spines off. It is very interesting that you have done this work.

Now, can you do anything with cholla?

Mr. IBANEZ. Not yet, we haven't worked on that. It is not very common in the area where we are.

Mr. SKEEN. Well, it is very common in the area where we are.

Mr. IBANEZ. It sure is.

Mr. SKEEN. It is the most noxious son of a gun I have ever seen in my life. If one spine drops off, they will re-seed itself.

Mr. IBANEZ. My wife, who is in the audience, had a run-in with cholla when we we were traveling to California one time. It was not pleasant.

Mr. SKEEN. It will leave you the mementos for a long time. Thank you for the testimony. I am sorry I had to leave and come back. I understand it was very interesting and I appreciate that kind of research on southwestern products.

Mr. IBANEZ. Thank you, sir.

Mr. DURBIN. He did miss the part where you said you were going to become part of the Texas A&M, not only part of the system but Texas A&M at Kingsville.

Mr. IBANEZ. That is correct.

Mr. SKEEN. I am very aware of that, but we don't want to publicize it because that is a huge network.

Mr. DURBIN. Thank you very much.

[The statement follows:]

Written Testimony

delivered by

Dr. Manuel L. Ibáñez

President

Texas A&I University

Kingsville, Texas

on

"Diversification Programs for Rural, Semi-Arid Texas:
High-Value Products from Mesquite and Cactus"

before

The Committee on Appropriations,

Subcommittee on Rural Development,

Agriculture, and Related Agencies

Washington, D.C.

April 1, 1993

Mr. Chairman, members of the subcommittee, I am Dr. Manuel Ibanez, President of Texas A&I University in Kingsville, Texas. I am here to request support for our agriculture diversification programs for rural, semi-arid Texas based on high-value products from mesquite and cactus. I am requesting $100,000 to continue these important research efforts. These two plants occur on nearly 100 million acres in the non-irrigated land resource base of Texas and other parts of southwestern United States and Mexico. Mesquite being a nitrogen fixing tree and cactus having a highly water use efficient photosynthetic pathway are outstanding candidates for low-input, sustainable economic development in some of the most destitute regions of our country.

From a financial point of view, one of the most serious world agricultural problems is that too many farmers are growing the same crops. This has has resulted in excess supplies of the major commodities with farmers in France, Germany, Argentina and the United States are all competing in a global economy for market share and price.

The most logical solution to this dilemma is to diversify American agriculture by developing alternative crops for the land resource bases. As is true for economic development in the industrial sector, more economic growth from crop diversification would be expected to occur from small agricultural businesses than large agricultural corporations.

Texas A&I has been involved with economic development of mesquite for BBQ uses, flooring and lumber, food products from the pods and drought resistant ornamentals for over 12 years. For the last 5 years we have concentrated on the barbecue, lumber and flooring uses since they have the highest value and volume potential. For example mesquite chunks packaged in 5 lb plastic bags has a wholesale value to $400 per ton and mesquite lumber has a value of $2,000/ton. Texas A&I has been an active participant in development of the mesquite barbecue chip and chunk industry. The 5 major chunk manufacturers have accounts with major chains such as Albertsons, Safeway, Brinkman, Weber Grills and they are in all 50 states. We are working with the barbecue manufacturers and the beef industry to co-market beef and mesquite to "add flavor without calories". The industry is now only about $3 million dollars a year, but it has only 1 % of the volume of the $400 million dollar charcoal briquette industry (that is often made from bituminous coal and clay binders without wood). Thus there is the potential to grow into a several hundred million dollar per year industry. This industry has seen

substantial growth over the last several years. Texas A&I is currently working with these barbecue members to adapt new developments in forestry manufacturing equipment to reduce the costs and increase production capacity.

Perhaps the most exciting development in the mesquite industry is the development of lumber, flooring and furniture from mesquite. Only recently have the similarities between the highly figured, orange/red colored mesquite lumber and the lumber of other exotic leguminous trees such as cocobolo, purpleheart, Brazilian rosewood and Indian rosewood become recognized. While mesquite is harder than domestic hardwoods such as oak, walnut and cherry, when it comes to three dimensional stability as measured by volumetric shrinkage, mesquite has one of the lowest values of all tropical hardwoods. Thus it has less tendency to swell and shrink with changing moisture conditions.

As a result of the ever increasing pressure to conserve habitat of on the forests of both northwestern United States and the tropic rainforests, May 1993 lumber futures increased by 100% in the last 6 months. Over the last 10 years U.S. hardwood exports increased 10 fold to be a $500 million dollar earner of foreign exchange. Clearly the hardwood furniture industry requires no subsidies and contributes significantly to our balance of payments.

Over the last 6 years we have been developing processes that can utilize short (30 inch), small diameter (7 to 11 inch diameter) mesquite logs to manufacture high value flooring. The process we developed has been transferred to the private sector and in the last 4 months they have spent $30,000 to upgrade the equipment developed at Texas A&I. Much more investment in equipment and market development is anticipated in the coming year.

Perhaps the most significant development in the mesquite lumber industry is the adoption of a revised Lumber Grading System (to take into account mesquites smaller boards) that is consistent with National Hardwood Lumber Association (NHLA) grading rules. This system will be considered by the NHLA at their annual convention in Dallas in October, 1993. Adoption of this system will permit the sale of lumber by FAX or phone throughout the world.

Texas A&I has also been involved in a major R&D program to develop the fruit, vegetable and forage uses of cacti. This is significant since cacti have a specialized photosynthetic pathway that is 4 times more efficient than the most efficient grasses or broadleaves in converting water to dry matter. Thus diversified agriculture systems based around cacti will be water efficient and could also help in reduction of atmospheric CO_2 concentrations by virtue of their great efficiency.

In the United States the model for cactus fruit production occurs in Salinas California where the D'Arrigo Bros farm about 300 acres of cactus. By using 14 inches of water from drip irrigation and by utilizing the 14 inches annual rainfall they produce about 20,000 lb of marketable fruit

per acre valued at about $10,000/acre. This fruit is sold in northeastern United States and southern Canada to those of Italian descent. Unfortunately this variety is not cold hardy enough to be used in Texas. Given annual returns of $2/acre for cattle and about $120/acre for sorghum, cactus could be a significant crop for Texas if cold hardy varieties could be developed.

We had significant fruit production from high producing clones, but they were killed by Christmas 1989 freeze. We have since obtained 30 more clones from high elevation sites in northern Mexico where temperatures of 10 F are routine. These new clones should fruit in 1993.

In Hispanic cultures the young, immature leaves of cactus, known as nopalitos, are consumed in fresh salads, in baked entrees, and pickled with garlic, onions and hot peppers. Texas A&I has also developed a spineless, highly prolific variety of cactus, known as Texas A&I 1308, in which the leaves can be eaten directly. From an initial release of only 700 plants in December 1989, over 30 farmers are now multiplying this variety for commercial production. Many of these are small farmers in isolated rural areas who supplement their income with sale of nopalitos. The major produce buyer in Texas (HEB) has agreed to provide a fixed price purchase contract for about $0.55/lb that would provide gross returns to farmers of several thousand dollars per acre. This will pave the way for large scale farming of nopalitos.

A major marketing tool in the sale of cactus leaves is the fact that it apparently contains a mild anti-diabetic principle that lowers levels of blood glucose, insulin and triglycerides. Clinical trials conducted in research hospitals in Mexico City have ascribed part of this effect to fiber and part to an as yet unidentified principle.

Since the late 1800's many ranchers have continued to rely on burning the spines off cactus for cattle feed during times of drought. This process is becoming more sophisticated with "least cost rations" being developed for supplementation to balance minerals, protein and energy requirements. One rancher in Cotulla, Texas has planted over 300 acres of native spiny cactus in rows for cattle feed.

The Texas A&I program is assisting with all aspects of cactus development for arid lands including; development of more cold hardy fruit varieties, registration of pesticides for use in farming and marketing. Every year Texas A&I co-sponsors an international conference on development of cactus. This years conference will have the food editor of Southern Living Magazine and the Food and Wine Critic of the San Antonio Express newspaper to participate in the conference and promote the use of cactus as a human food.

After 14 years of R&D at Texas A&I University, private industry is also beginning substantial investment in a rapid growing nitrogen fixing tree or shrub, Leucaena leucocephala, that is useful for cattle feed. This shrub has been planted widely in the tropics for firewood and forage,

but never grown commercially in the United States. Leucaena has high protein leaves (about 24 % protein) and has grown 12 ft in 5 months in southern Texas. Leucaena shows particular promise for the cattle industry in Texas, since it is 100 % resistant to the disease (cotton root rot) that prevents alfalfa from being commercially grown in most of Texas. However Leucaena has also been successfully grown in Florida, Arizona and California and has potential throughout southeastern United States.

Mr. Edwin Singer, a cattleman with a background in the petroleum industry has become very interested in developing leucaena as new high protein feed for the livestock industry in Texas. In 1992 he planted 1.2 million seedlings on a pivot irrigated farm south of San Antonio and will plant 1 million seedlings per year until 1,000 acres have been planted. Mr. Singer has also purchased a self propelled forage harvester to harvest the crop and has retained an agriculture engineering firm to develop passive geothermal techniques to dry and pelletize this crop for range cubes. By the end of 1993, Mr. Singer and associated will have invested nearly half a million dollars in this project.

In summary, the applied R&D at Texas A&I University to diversify American agriculture has attracted very significant investment and participation from the private sector. The industries in each of the three areas of R&D i.e. cactus, leucaena and mesquite areas of R&D are experiencing 20 -30 % yearly growth in very low income rural areas of Texas that desperately need economic growth. These crops being developed do not require price supports. I strongly urge you to fund this R&D project that has demonstrated great capability to assist with economic growth.

Merrill Lynch, Pierce, Fenner & Smith Inc.

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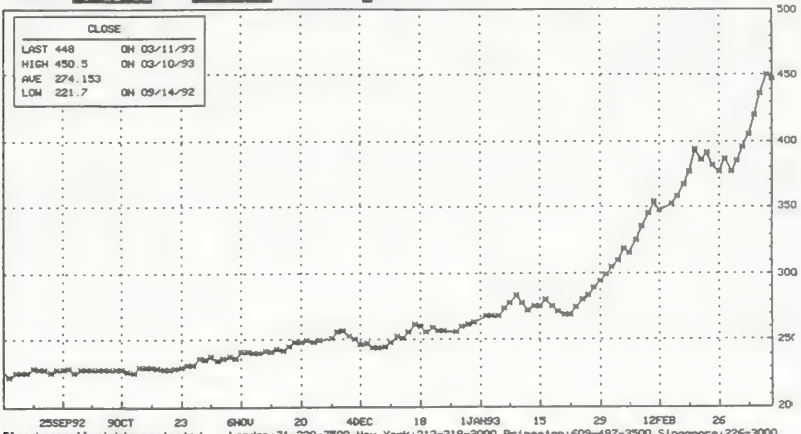
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CENTER FOR NORTH AMERICAN STUDIES
CENTER FOR MEAT AND POULTRY SAFETY AND QUALITY AGRICULTURE RESEARCH PROGRAMS

WITNESSES

DR. EDWARD A. HILER, TEXAS A&M UNIVERSITY SYSTEM

GENERAL JULIUS W. BECTON, JR., PRESIDENT, PRAIRIE VIEW A&M UNIVERSITY

Mr. DURBIN. Dr. Edward Hiler and General Julius Becton, thank you for joining us today. From Texas A&M University System, Research Projects and Laredo State University Center for North American Studies.

Mr. SKEEN. One of the finest universities in the entire world.

Mr. DURBIN. We are not parochial at all here. We love everybody. We just love some people more.

Mr. HILER. Thank you very much, Mr. Chairman.

I am Ed Hiler. I am with the Texas A&M University System, as indicated. I would like to make brief comments about two projects that have been authorized in the past session, and we are here seeking appropriation on these, then comment very briefly about three special grant projects that have continuing appropriations and then call on President Becton, of Prairie View A&M University, another university in the Texas A&M University System, to focus on the dairy goat research that is ongoing there that Chairman de la Garza mentioned at the beginning.

The first project is a Center for North American Studies. We are requesting initial funding of one-half million dollars for the establishment of this center. Authorization for the center is contained in the Enterprise for the Americas Initiative Act of 1992, which was approved by Congress last year, as I indicated.

The profitability and future viability of U.S. agricultural and food industries are critically dependent on strong growing international markets. As Mexico opens its economy, the United States faces the increased competition from Japan, Asia, Australia and Europe. We want to be able to continue to meet and surpass that competition.

The proposed North American Free Trade Agreement, as you know, will boost trade and foster continued economic integration of these three North American countries. The growing trade and economic integration of the three countries is creating tremendous need and opportunity for cooperation in addressing key agricultural and food issues, such as foreign market opportunities for food and agriculture products, international trade and trade policies. Natural resource environmental problems is certainly an important area and policy issues related to food safety and nutrition, plant and animal pest management, food marketing and distribution and agricultural resource use. The Center for North American Studies will serve as a primary means of identifying opportunities and addressing problems related with growing agriculture and food trade and integration of North American countries.

Such a center will provide leadership in promoting better agricultural relationships among these countries through cooperative study training and research. The center would be headquartered at

Texas A&M University and include a consortium of universities within our system, including Texas A&I University, Laredo State University, and others. The satellite centers would be located at each of these participating campuses.

Each consortium member will build on its strength and work together in cooperation with the other established agricultural research and training centers and organizations throughout North America to achieve the overall goals of the center. This initiative will build on existing strengths and linkages with other universities where collaborative efforts are in place, and many of those are along the borders with U.S. and Mexico.

The Texas A&M University system is uniquely qualified, we believe, to do this because of its strategic location and because of these universities that are located in the system very close to the Texas-Mexico border.

The second project is requesting an appropriation of $4 million for the establishment of a Center for Meat and Poultry Quality and Safety. Authorizations for centers with this mission is contained in Title XVI of the 1990 Farm Bill. Recent events dealing with E. coli contamination of ground beef have heightened the concern and awareness of the food industry and the consumer about food safety. U.S. Department of Agriculture has announced its intention to completely revise its meat and poultry inspection system. The new system will be based on the latest scientific findings dealing with potentially harmful microorganisms, risk assessment, detection systems, and anti-bacterial agents, as well as other critical elements of the inspection process.

Educational training programs are very essential to a knowledgeable and skilled work force in the food industry and consumers need information that will minimize the risk of food contamination in the home. This center would develop its research and educational programs around these issues to provide a flow of useful information and technology not only to regulatory agencies but also to the food industry and to consumers.

Texas A&M University is uniquely qualified to support a Center for Meat and Poultry Safety and Quality. We have outstanding laboratories currently in place at the university for this center. Also, USDA has a major presence on the Texas A&M University campus with programs of great importance to meat and poultry safety. The Food Safety and Inspection Service National Training Center is located on the campus of Texas A&M University, and there is much interaction and utilization of Texas A&M faculty in teaching in this training program.

Also, the USDA/ARS has its Food Animal Protection Laboratory located adjacent to the College of Veterinary Medicine which much collaborative research between ARS scientists and Texas A&M faculty is in progress in several areas of food safety. This type of partnership between Federal and State scientists will further be strengthened through the establishment of this proposed center.

Let me just very briefly, then, mention three special grant projects for which we are requesting continuing appropriations. The first two are in the policy area. One is a regional impact of farm programs on crop farms.

This is a joint activity with the University of Missouri, and the second is the National Institute for Livestock and Dairy Policy, which is joint with Cornell University. These two projects have been extremely successful in providing timely information to congressional committees involved in farm program legislation. Members of the House and Senate committees on agriculture call on this group for analysis as many times as they deliberate agricultural policy.

The final project, then, is the Wool and Mohair Laboratory. With the closure of the USDA Wool Laboratory in California several years ago, Texas has assumed national leadership for wool and mohair research. This work provides some pass-through money also to Montana and to Wyoming, Montana State University and University of Wyoming. This laboratory serves the entire industry and collaborates with Federal and State scientists throughout the western region.

The industry is extremely supportive of this program since it focuses on quality parameters that are very important to maintaining the competitive position in the world market.

With that, let me turn to President Becton for comments related to the dairy goat research ongoing at Prairie View A&M University.

General BECTON. Thank you, Dr. Hiler. I am Julius Becton, the president of Prairie View A&M University, been there since December of 1989. You have a copy of my prepared remarks, and I would like to submit them for the record and make a few comments.

The International Dairy Goat Research Center was established in 1983 as an operational component of the Agricultural Research Center at Prairie View A&M University. The Center was developed through grants from the CSRS. The primary objective of the Center is to generate and disseminate technical information concerning herd management to dairy goat owners. The Center's major research activities are supported by the Evans-Allen and special grant funds, while smaller scale special projects are provided by public and private sources.

The International Dairy Goat Research Center conducts research in response to basically three areas: The identified needs of goat producers; the information voids on alternative solutions to critical issues of the dairy goat husbandry; and thirdly, the needs for hands-on technical assistance to members of the industry. These activities, combined with the publication of findings and technical and professional organization publications, contribute to the improved economic status of Texas goat farmers/ranchers, add to the revitalization of agriculture industry, and support similar developmental and enhancement activities for the national and international community. Also each year the Center conducts a field day for local and area goat producers and participates in the 4–H Kid Give-Away Program for local youth.

Although the Center's primary objective continues to place research emphasis on nutrition, reproduction, and health of dairy goats, in 1988 the focus expanded to include a leadership role in mapping a strategy to develop a cashmere-producing industry in

Texas and the Nation. Most recently, a focus on meat goats as a research thrust has been added.

While responding to the research needs and demands of the goat owners in Texas and neighboring States, the Center in collaboration with the Institute for International Agribusiness Studies at Prairie View A&M University, serves as a U.S. counterpart in start-up and ongoing research in lesser developed countries where goats are utilized as a primary research model. The Center is now in the role of pioneer and being identified as a model facility for international goat management capabilities and research.

Collaborative activities have been initiated with several universities to include the National Autonomous University of Mexico, and a University of Nueva Leon in Monterey, Mexico. We also have a memorandum of understanding between the People's Republic of China and the Center for Joint Agricultural Programs. Also additional benefactors of research activity include workshops and/or seminars in China, in Brazil, in Guatemala, the Dominican Republic, St. Vincent, Korea, Panama, El Salvador, Jamaica, Barbados, Mexico, Egypt, and Malaysia.

The International Dairy Goat Research Center has obtained non-federal funding support from the Texas Agricultural Diversification Program in cooperation with the Texas Dairy Goat Producer Association, as well as we have also received non-federal funding from the San Antonio Livestock Exposition, Incorporated. The purpose of establishing an endowment for research fellowship in caprine research, the Texas A&M University system provided matching support for this fund.

Sir, this concludes my remarks, but I respectfully request the committee continue support for this proposal.

Mr. DURBIN. Thank you.

Mr. HILER. Thank you very much. We would be happy to respond to questions on any of these projects.

Mr. DURBIN. I don't have any questions, per se, but I would note that the Administration is calling for a change in this program, the Wool and Mohair Program, and I imagine this will have some impact on the activities at your Dairy Goat Research Center. I am not sure what that might be at this moment. The expert in the area is to my left. I would defer to him. Mr. Skeen.

Mr. SKEEN. Well, I don't know how much of an effect it is going to have on the meat goat business and so forth because it is a different-meat and mill goats are a drastically different breed than the hair goats, the mohair goats, but I think it is a program that is greatly misunderstood because I don't think that most people realize that the money that comes into the wool and mohair program, per se, comes from duties collected on imported wool and mohair from Australia, New Zealand, from South Africa, and other countries, and 25 percent of it stays with the Treasury and the other 75 percent is returned to the growers in this country on an incentive basis. That is the program. I don't think it will have a lot to do with it.

You have an interesting program, President Becton, and Dr. Hiler, for this Center, the meat and poultry grading system, could you include fish in that?

Mr. HILER. Certainly.

Mr. SKEEN. Since we were talking about fish earlier.

Mr. HILER. We have a campus at Galveston where we have much work going on related to seafood, and I think seafood may wind up being a bigger problem than any of the other areas.

Mr. SKEEN. Well, virtually nothing is being done as far as an organized fish inspection system is concerned.

Mr. HILER. The extension of that would be a natural kind of thing, but obviously the major microorganism problems with beef right now are very significant. I failed to mention we have made a proposal to Secretary Espy with regard to this Center.

Mr. SKEEN. I think it would be a natural adjunct for you if you are going to do that kind of quality analysis.

Mr. HILER. Certainly.

Mr. SKEEN. President Becton, I want to encourage everybody to try goat milk and cojito.

Mr. BECTON. I have used it. Delicious.

Mr. SKEEN. Not much familiarity in this part of the country, but in our part of the country it is well liked.

I want to apologize to Dr. Merrifield for having missed your testimony. I want you to know that I have read your testimony and appreciate your responses in your program very much. We are going to give it every consideration. Thank you.

Thank you, Mr. Chairman.

Mr. DURBIN. This panel can bet that when we close our doors and start to deliberate, Texas A&M will be remembered.

Mr. BECTON. A&M system, sir.

[The statements of Mr. Hiler and General Becton follow:]

Statement in Support of Appropriations for

A Center for North American Studies

at

Texas A&M University

The profitability and future viability of the U.S. agricultural and food industries are critically dependent on strong, growing international markets. Canada and Mexico are now the first and third largest agricultural trading partners of the United States. The proposed North American Free Trade Agreement (NAFTA) will further boost trade and foster continued economic integration of the three countries. The growing trade and economic integration of the three North American countries is creating tremendous need and opportunity for cooperation in addressing key agricultural and food issues, such as foreign market opportunities for food and agricultural products, international trade and trade policies, natural resource and environmental problems in North America, and policy issues related to food safety and nutrition, plant and animal pest management, food marketing and distribution, and agricultural resource use.

A Center for North American Studies will serve as a primary means of identifying opportunities and addressing problems associated with growing agricultural and food trade and integration of North American countries. Such a center will provide leadership in promoting better agricultural relationships among the North American countries of Canada, Mexico, and the United States through cooperative study, training, and research. Authorization to establish a Center for North American Studies is provided in the Enterprise for the Americas Initiatives Act of 1992.

Goals and Objectives of the Center for North American Studies

The overall goal of the Center for North American Studies is to promote strong agricultural ties among the three countries of North America. The Center will focus on cooperative study, research, and training programs to secure open, growing trade with our most important trading partners, to insure continued competitiveness of U.S. agriculture, and to foster greater cooperation among the three countries in addressing a broad range of critical agricultural issues of common interest. The specific objectives of the Center in each of the three program areas include:

Cooperative Study

- Develop cooperative linkages with universities with internationally recognized agricultural programs in the United States, Canada, and Mexico to analyze the interaction and integration of the economic, trade, institutional, social, cultural, political, environmental, and technological dimensions of the agricultural and food systems of North American countries.

- Foster integration of university scientific research capabilities and private sector initiatives to study problems related to agriculture and natural resource utilization.

- Cooperatively build and maintain a database of information relating to North American agriculture in support of Center programs.

Research

- Investigate issues relative to the competitiveness of the agricultural and food systems of North American countries, such as economic and technical change, general economic, trade, and agricultural policy linkages among North American countries, the consequences of freer trade under NAFTA and GATT, and institutional and strategic relationships in world markets.

- Analyze the natural resource and the environmental implications of increased trade and economic integration of North American countries, including issues related to environmental standard harmonization among North American countries, the cost and benefits of improved environmental quality, especially for transboundary natural resources (i.e., water and air), alternative institutional arrangements for addressing oversight capabilities such as the monitoring and enforcement of environmental regulations, and environmental liability assignments.

- Examine production, consumption, trade, and policy issues related to pest management associated with the mobility and potential transfer of resources and agricultural products across borders, including alternative pesticide-use and management strategies, the development and transfer of technologies related to pest-resistant cultivars, the risk of pesticide exposure among farm workers, the extent and effects of organochlorine insecticide residues in migratory birds and on agricultural produce imported from Mexico and elsewhere, and the incidence of communicable animal diseases and parasites that represent serious economic and/or health risks.

Training

- Disseminate cooperative study and research results through conferences, workshops, seminars, and other training opportunities for small and medium-sized agricultural and food producers, agribusinesses, and potential exporters.

- Foster environmental management training and technology transfer for promoting sustainable development.

- Provide training for community-based strategies for integrating trade and environmental improvement programs.

- Provide academic training and practical experience to undergraduate and graduate students related to resolving the critical issues for North American agriculture.

- Provide executive training opportunities for agribusiness leaders relating to the critical issues for North American agriculture.

Organization and Operation of the Center for North American Studies

The Center for North American Studies would complement the ongoing international agricultural research and training programs within the Texas A&M University System on North American agricultural issues. The Center will include a consortium of universities and centers within the System. Each consortium member will build on its strengths and work together in cooperation with other established agricultural research and training centers and organizations throughout North America to achieve the overall goals of the Center.

The Center will be headquartered at the main campus of Texas A&M University with satellite centers at the participating consortium member locations. The Center will function as an administrative unit within the Agricultural Program of the Texas A&M University System. A unique feature of the Center for North American Studies will be the multi-university, multi-disciplinary approach to addressing the critical issues facing North American agriculture.

Cost

In the first year of operation of the Center, a primary focus will be the development of linkages and cooperative program operation and management mechanisms among consortium members and with other agricultural and food research and training organizations in Canada, Mexico, and elsewhere in the United States as needed. As the Center becomes established and cooperative study and research opportunities begin to expand, funding requirements will also expand from an initial $500,000 in the first year to $750,000 and $1,000,000 in the second and third years, respectively.

Proposed Budget for the Center for North American Studies

Expenditures	Year 1	Year 2	Year 3
Cooperative Study	$ 200,000	$ 300,000	$ 400,000
Research	200,000	300,000	400,000
Training	100,000	150,000	200,000
TOTAL	$ 500,000	$ 750,000	$ 1,000,000

Expenditures will be in three main areas: (1) personnel including primarily non-tenure track researchers and scientists, research associates, technicians, lab assistants, computer programmers, and other technical support staff, (2) capital expenditures including primarily purchases of computers and other analytical support equipment, and (3) supplies and other expenses related to training programs.

STATEMENT IN SUPPORT OF APPROPRIATIONS FOR RESEARCH
in
CENTER FOR MEAT AND POULTRY SAFETY AND QUALITY
at
TEXAS A&M UNIVERSITY

Texas A&M University is uniquely qualified to be selected for one of the proposed centers as designated in Title XVI of the 1990 Farm Bill for the establishment of a Center for Meat and Poultry Safety and Quality. The Center for Meat and Poultry Safety and Quality will focus on improving the safety and quality of meat and poultry products provided for the consumer through research and educational efforts directed at all levels of production and marketing segments of the livestock and poultry industry. A comprehensive organization of individuals with expertise in all facets of production, processing, distribution and preparation will allow the Center to serve as an information collection and distribution point for the meat and poultry industry, regulatory agencies, foodservice and retail industry, and the consumer.

Assuring the safety and quality of food products is of great importance to the public. The Center will serve to conduct research with regard to freedom of meat and poultry from potentially harmful bacteria, residues, and other safety concerns and will provide solutions to problems of consistency and uniformity of product production and preparation. The Center will work with producers, processors, retailers and consumers in transferring new technologies and emphasizing components of food safety; will assist regulatory agencies in developing risk and science-based inspection systems; will allow for the long-term improvement in meat and poultry products that will assure greater consumer confidence; and will improve profitability opportunities for all segments of the industry.

The establishment of a Center for Meat and Poultry Safety and Quality at Texas A&M University will benefit from several excellent facilities that are already in place which conduct research and educational activities. Outstanding research laboratories are available in the Kleberg Animal and Food Sciences Center, Rosenthal Meat Science and Technology Center, Scoates Engineering Building, and within the College of Veterinary Medicine Complex on the campus of Texas A&M University. In addition to these facilities, construction is underway on a $11.3 million Animal Science Teaching, Research and Extension Complex adjacent to the main campus. This modern facility will include centers for beef cattle, animal euthenics, sheep and goats, swine and nutrition-physiology. The complex is designed to enhance strong programs in modern livestock management and provide up-to-date classrooms, laboratories, animal-holding facilities and auditoriums for teaching, research and extension programs. A $1.3 million Dairy Products Teaching and Research Center will be constructed on the West campus to complement the Rosenthal Meat Science and Technology Center. Construction of a $38.5 million addition to the College of Veterinary Medicine is in its final stages.

In addition to outstanding facilities, several programs exist which complement the activities of the Center for Meat and Poultry Safety and Quality. Individuals from the College Station main campus, researchers from the Texas Agricultural Experiment Station, extension specialists from the Texas Agricultural Extension Service, and selected faculty from throughout the Texas A&M University System including Texas A&I University, Laredo State University and Prairie View A&M University may be called upon to support the programs of this Center. A critical mass of faculty in over 21 academic departments within more than 8 academic institutions and state and federal agencies exists to provide current program linkages with food emphases.

The Texas FoodSafe Program will serve to complement the Center's activities and respective programs on the Texas A&M University campus. The Texas FoodSafe Program stresses the vital importance of having each link of the food marketing chain–production, distribution and consumption–share in the responsibilities of the safety of the food supply. This program reaches all phases of the food marketing system utilizing hazard analysis critical control points (HACCP), in addition to a widespread effort to address the concerns of consumers and the scientific community on food safety issues.

The USDA's Food Safety and Inspection Service National Training Center has been located on the Texas A&M campus since the late 1980s. Texas A&M faculty teach selected modules in meat chemistry, microbiology, trends in the meat industry and other related topics. Several USDA instructors serve as adjunct professors in various departments allowing significant interaction between Texas A&M faculty, staff, students, and USDA personnel. This involvement assures that research results are made available to meat inspectors in the shortest possible time. Collaborative research will also be undertaken with the USDA/ARS Food Animal Protection Laboratory.

Additionally, Texas A&M has been selected as the principal U.S. university in a University Cooperative Project funded by USAID related to animal diseases of importance to the United States and Mexico. As Texas will serve as the principal entry point for importation of livestock from Mexico under NAFTA, this state will be the center for much of the initial screening for zoonotic and food safety pathogens that are of particular concern for Mexican livestock.

Several research and educational components will be addressed in this Center and focus primarily on safety and quality initiatives. Without question, meat safety issues have been the focal point of media and consumer interests relative to food during the 1990s. Questions regarding the safety of meat and poultry products and whether or not consumers can be protected by the current regulations and guidelines often are in the headlines. Each outbreak of foodborne illness or alleged incident of improper procedures by the meat industry has eroded public confidence in the safety of meat products. Assuring meat and poultry safety cannot simply be an activity of the United States Department of Agriculture (USDA), but rather demands a comprehensive understanding of and sensitivity to potential problems from farm to plate. The following initiatives will be examined within the programmatic focus of the Center:

- On-Farm Reductions in Food Safety Related Pathogens
- Trace-back Investigations
- Reduction of Microbial Contamination
- Development of Rapid Microbiological Tests
- Risk Analysis
- Response of Bacterial Heat Resistance to Handling and Preparation Practices
- Foodservice and Retail Training Programs
- Consumer Education
- HACCP Implementation
- Meat and Poultry Quality

These initiatives will complement existing meat safety activities and will result in improvements in reducing the perceived and/or real risks associated with consuming meat and poultry. Although not specifically addressed in this proposal, seafood safety is a relevant issue of importance relative to meat safety and will be considered in the research programs.

The cost of establishing a Center for Meat and Poultry Safety and Quality at Texas A&M University and associated operations for FY '94 is $4 million.

STATEMENT IN SUPPORT OF APPROPRIATIONS FOR RESEARCH
in
REGIONAL IMPACTS OF FARM PROGRAMS ON CROP FARMS
at
TEXAS A&M UNIVERSITY

The major objective of this project is to evaluate, upon request of the House and Senate Agriculture Committees, the farm level impacts of proposed changes in farm policy and macroeconomic policy on crop farms in major production regions of the United States. This CSRS appropriation ($348,000 FY 1993) is shared with FAPRI at the University of Missouri. The role of FAPRI is to work with the Agricultural and Food Policy Center (AFPC) at Texas A&M University to develop an annual 10-year baseline of future farm prices, interest rates, and government expenditures, assuming continuation of the current farm policy. This baseline analysis serves as a basis for comparison of alternative farm policies.

AFPC utilizes this FAPRI baseline in combination with a data set for 33 representative crop farms which it developed and maintains for major production areas throughout the United States (Figure 1). The representative farms are developed with the cooperation of a panel of farmers in each location. Data collected from these farms provide input into an AFPC simulation model, the output of which is an income statement, cash flow statement, balance sheet, and economic viability measures. Before a representative farm is utilized for analytical purposes, the producer panel must verify the model's ability to simulate the farm they helped AFPC faculty develop.

The simulation model has been developed, peer-reviewed, and continuously improved over a period of 12 years. Peer-review research publications developed as a result of the model include 39 refereed journal articles and more than 100 other publications. The main AFPC output for communicating with the Congress are a series of briefing and working papers that are produced on a timely basis as requested by the Agriculture Committees. Results are also communicated in Committee hearings, group congressional staff briefings, and discussions with individual congressional staff members. Staff contact, in group briefings and individually, plays a major education function in light of frequent staff turnover.

Since the project began four years ago, AFPC faculty have participated in 18 formal hearings, 30 group staff briefings, and 150 individual staff briefings. AFPC faculty are regularly called on by professional and farm organizations to present their research results. Over the past four years, AFPC faculty have addressed 180 predominantly academic, agribusiness, and farm audiences bringing them in contact with an estimated 18,000 individuals. At these meetings, media interviews result in the distribution of our research results to a much larger audience.

For the 1990 Food, Agriculture, Conservation, and Trade Act, AFPC faculty served as authors and editors with university faculty throughout the United States for a series of

leaflets explaining the consequences of farm program options for the major farm bill titles. These leaflets served as the basis for Extension Service policy education programs throughout the United States.

Continuing funding for this project supports the maintenance of the data necessary to analyze policy impacts on 33 crop farms, which must be updated every three years; the development or replacement of new farms; and the continuing analyses of policy options.

Figure 1. Panel Crop Farms Developed by AFPC



STATEMENT OF SUPPORT FOR APPROPRIATIONS FOR RESEARCH AT WOOL AND MOHAIR LABORATORY

TEXAS A&M UNIVERSITY

The Wool and Mohair Laboratory serves as a national research facility for the sheep and goat industry. With the closure of the USDA/Agricultural Research Service wool research program in Albany, California in the mid 1980's, equipment and other support units were transferred to the Texas Agricultural Experiment Station to assist in the establishment of the new research facility. Funds from the industry and the State of Texas were used to construct a building to house this research project. The Laboratory has been in operation for ten years and conducts research of importance to the industry throughout the U. S. This national role clearly justifies federal investment in this research program.

The principal objectives of the research program are to: (1) Develop and evaluate measurement techniques for rapid, objective evaluation of wool, mohair, cashmere and other animal fibers and (2) Use objective measurements to increase fiber production, quality and income to producers through improved animal selection, nutrition, management and marketing efficiency. With the increasing emphasis on the production and utilization of natural fibers for clothing, related household and industrial products, this research is critical to maintaining a competitive position for the sheep and goat industry. New technology is needed to develop production systems and advanced marketing techniques that will out pace foreign competitors. This fiber research is a critical part of a continuum of technology development that exploits the inherit advantages of these natural fibers. The sheep and goat industry is of great economic importance to many western states and is highly dependent on the infusion of technologies which will make their product more attractive in the market place.

This research program represents a broadly based partnership involving federal, state and industrial collaborators. Funding through this program is shared with State Agricultural Experiment Stations in Montana and Wyoming. Joint research projects have been conducted with four USDA/Agricultural Research Service locations. Other collaborative projects have been undertaken with public and industrial scientists in New Mexico, California, Colorado, Idaho, Nebraska, Oklahoma and Wisconsin. In these relationships, the Wool and Mohair Laboratory serves as a valuable resource in evaluating and characterizing fiber samples from experiments conducted in other laboratories. An inventory of state-of-the-art equipment has been maintained in order to use the most modern technology available for objective measurements. The transfer of the technology from this research has been rapid and effective as evidenced by the heavy industrial involvement.

It is requested that $250,000 be appropriated for FY 1994 in support of the Wool and Mohair Laboratory at Texas A&M University.

STATEMENT IN SUPPORT OF APPROPRIATIONS FOR RESEARCH
in
NATIONAL INSTITUTE FOR LIVESTOCK AND DAIRY POLICY
at
TEXAS A&M UNIVERSITY

The major objective of this project (NILDP) is to evaluate, upon the request of the House and Senate Agriculture Committees, the economic impacts of proposed changes in farm and macroeconomic policy on livestock and dairy farms in major production regions of the United States. This CSRS appropriation ($525,000 FY 1993) is shared with Cornell University.

The role of the Agricultural and Food Policy Center (AFPC) at Texas A&M is to conduct economic analyses of proposed farm program changes, including agriculture sector and farm level impacts. For some livestock commodities such as sheep and goats, AFPC is the only university that has this modeling capability. Because of the complexity of dairy policy, including its federal milk marketing order and purchase program provisions, dairy subsector models must be developed and maintained separate from broader agriculture sector models.

The regionally dispersed nature of milk production has resulted in the development of data to analyze 20 representative dairy farms, with the cooperation of producer panels in the major dairy production regions (Figure 1). These farms are utilized to evaluate the relatively unique regional impacts of dairy policy changes. Because of the interest and controversy surrounding the BST technology in dairy, considerable research effort has been expended at both AFPC and Cornell on the impacts of technological change in dairying.

A unique dimension of the NILDP project is an outreach component designed to explain to congressional staff, dairy farmers, cooperative staff, and the general public how complex dairy programs operate. Proposals for changes in dairy policy are also explored. To do this, AFPC participates, under the leadership of Cornell University, in the development of a series of dairy policy leaflets utilized throughout the U.S. dairy industry as the single most important source of dairy policy education materials. Dairy economists from the University of Wisconsin, Clemson University, Michigan State University, Pennsylvania State University, and the University of Missouri also participate in this project dimension.

The complexity of dairy policy has also led to extensive work with congressional staff located in dairy states. In particular, prior to the 1990 farm bill development, a series of five meetings were held, involving up to 30 staffers in each meeting, to discuss the nature of current dairy policy and the consequences of changes in policy. During 1991, AFPC was requested by the House and Senate Agriculture Committees to evaluate more than a dozen dairy supply management policy options. These quick response analyses were used by Congress to make informed decisions on dairy policy.

The work of NILDP is by no means limited to dairy. AFPC has primary responsibility for analyses of the impacts of changes in crop policy on the livestock sector. For these purposes, AFPC maintains data sets for eight representative hog farms and seven representative ranches that allow analysis of farm level impacts for policy changes on hogs, beef, and sheep. While our appropriations are for the purpose of analyzing farm program changes, AFPC has completed three analyses of the impacts of increasing grazing fees on public lands.

Continuing funding for this project supports the maintenance of the data to analyze 20 dairy farms, eight hog farms, and seven ranches, which must be updated every three years; the development or replacement of new farms; and the continuing analyses of policy options.

Figure 1. Panel Livestock & Dairy Farms Developed by AFPC



PRAIRIE VIEW A&M UNIVERSITY

INTERNATIONAL DAIRY GOAT RESEARCH CENTER

The International Dairy Goat Research Center (IDGRC), established in 1983, is an operational component of the Cooperative Agricultural Research Center (CARC) at Prairie View A&M University and is administered by the Research Director. The Center was developed through grants from the Science and Education Administration, Cooperative State Research Service, United States Department of Agriculture. The primary objective of the Center is to generate and disseminate technical information concerning herd management to dairy goat owners. The Center's major research activities are supported by Evans-Allen and special grant funds, while smaller scale special projects are funded by public and private sources.

STATE, NATIONAL AND INTERNATIONAL BENEFITS TO ECONOMIC DIVERSITY

The International Dairy Goat Research Center conducts research in response to: 1) the identified needs of goat producers; 2) information voids on alternative solutions to critical issues of dairy goat husbandry; and 3) needs for hands-on technical assistance to members of the industry. These activities, combined with the publication of findings in technical and professional organization publications, contribute to the improved economic status of Texas goat farmers/ranchers, adds to the revitalization of the agricultural industry, and supports similar developmental and enhancement activities for the national and international community. Each year the Center conducts a field day for local and area goat producers and participates in the 4-H Kid Give-Away program for local youth.

Although the Center's primary objectives continue to place research emphasis on the nutrition, reproduction, and health of dairy goats, in 1988 the focus expanded to include a leadership role in mapping a strategy to develop a cashmere-producing industry in Texas and the nation. Most recently, a focus on on meat goats as a research thrust has been added.

While responding to the research needs and demands of goat owners in Texas and in neighboring states, the IDGRC, in collaboration with the Institute for International Agribusiness Studies at Prairie View A&M University, serves as a U.S. counterpart in start-up and on-going research in Lesser Developed Countries where goats are utilized as the primary research model. The IDGRC is now in the role of pioneer and is being identified as a model facility for international goat management capability and research.

Collaborative activities have been initiated with several Universities to include the following:

1) National Autonomous University of Mexico in Mexico City to engage in information exchange on goat production; identification and exchange of genotypes of goats; research and development concerning production of goat meat, milk, and cashmere fiber and skins; scholarly exchange; and joint scientific conferences every five years beginning in 1991 in Mexico.
2) University of Nueva Leon, Monterey, Mexico to promote a collaborative research and training relationship between the two institutions to include scientist and student exchange.

3) Memorandum of Understanding between the People's Republic of China and IDGRC for joint agricultural programs; scientific and scholarly exchanges on goat production and reproduction; identification and promotion of goat genotypes throughout the world; and research and development of multi-purpose goats for producing fiber, meat, milk and skins; and technical training.

4) Additional benefactors of research activities include: Workshops and/or seminars in China, Brazil, Guatemala, the Dominican Republic, St. Vincent, Korea, Panama, El Salvador, Jamaica, Barbados, Mexico, Egypt and Malaysia. Specific training has been provided for professionals from Barbados, Jamaica, Egypt, Costa Rica and Honduras on dairy goat technology.

RESEARCH ACTIVITIES AND FUNDING

Special funding for the International Dairy Goat Research Center from USDA began in FY '86. The research areas supported by these funds since 1985 include:

FY '86 Chemical & Biological Characteristics of Goat Milk and Cheddar Cheese
Principal Investigator: Young Park
Funding: $90,060

FY '87 The Use of Gene Transfer to Improve Caprine Genetics
Principal Investigator: Louis Nuti
Funding: $90,060

FY '88 Nutritional Evaluation of Alternative Foodstuff for Dairy Goats
Principal Investigator: Nelson Escobar
Funding: $90,060

FY '89 Establishing a Breed of Cashmere Goats
Principal Investigator: Thian H. Teh
Funding: $90,060

FY '90 Evaluation of Goat Conceptus and Pregnancy Specific Endometrial Proteins
Principal Investigator: Gary Newton
Funding: $70,152

FY '91 Isolation and Characterization of Major Cell Wall Proteins of C. Pseudotuberculosis
Principal Investigator: Cleantis Braithwaite
Funding: $71,100

FY '92 Changes in Vaginal Mucus Traits in Goats
Principal Investigator: Louis Nuti
Funding: $70,041

FY '93 The Use of Genetic Evaluation Procedures for Selection in Goats
Principal Investigators: Jackson Dzakuma & Eric Risch
Funding Pending: $70,992

OUTSTANDING RESEARCH

The following research activities have ensued as components of the aforementioned research thrusts.

1. Role of Proteins in Caprine Conceptus
2. Mobility, Morphology and Quality of Caprine Spermatozoa
3. Immunuglobulins in Caprine Colostrum
4. Efficacy of Vitamin A in Goat Kids
5. Quantity and Quality of Cashmere from F1 Offsprings
6. Physiology of Cashmere Production
7. Effects of Colostrum Quality and Sources on Survival of Neo-natal Goat Kids
8. Protein Requirement of Growth Performance of Growing Goats Phosphorus Requirement on Bone Matrix and Integrity of Growing Goats
9. Nutritional Evaluation of Alternative Feed-stuffs for Dairy Goats
10. Physiological Evaluation of Diarrhea in Dairy Goat Kids, Prevention and Treatment of Diarrheic Kids
11. Caprine Arthritis Encephalitis - Determination of non-medicinal Method of Interrupting the Dam/daughter Transmission of the CAEV
12. Comparative Anthelminic Study of Dairy Goats
13. Study of Factors Affecting Post-thaw Viability of Goat Embryos
14. Determination of Time of Preovulatory Lutenizing Hormone Surge using Prostaglandin Hormones for Improving Artificial Insemination and Induced Parturition of Dairy Goats
15. Preliminary Study with In-vitro Fertilization of Follicular Stage Goat Oocytes
16. Effects of Day of Pregnancy on Proteins Secreted by the Peri-implantation Caprine Conceptuses and Maternal Endometrium

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17. Induction of Estrus with Cloprostenol and Morgestomet in Cycling and Noncycling Dairy Goats: Determination of the Time of the Preovulatory LH Surge and its Relationship to Fertility

NON-FEDERAL FUNDING SUPPORT

The International Dairy Goat Research Center has attained non-federal funding support from the following entities:

1. Texas Agricultural Diversification Program in cooperation with the Texas Dairy Goat Producers Association of Sanger for:

a) the promotion of a comprehensive bilingual marketing package of written and video materials to inform producers and educate consumers on the variety of products from goat cheese, befir, chevron or cabrito, leather, blood serum for medical tests to milk for infants with dairy-sensitive diets - $10,000.

b) the establishment of a model specialty fruit and vegetable diversification farm for business assistance and training in the upper costal counties region for new and expanding farm and agribusiness operations - $12,000.

c) the development of a cashmere industry in Texas through documentation of appropriate production techniques and genetic resources to cross with existing Spanish goat populations in cooperation with the Texas Agricultural Experiment Station in San Angelo - $15,000.

2. The San Antonio Livestock Exposition, Inc. provides support to establish an Endownment for Research Fellowships in Caprine Research - Funding: $100,000. The Texas A&M University System provided matching support for the fund.

MELALEUCA RESEARCH

WITNESS

HON. E. CLAY SHAW, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. DURBIN. At this point, I would like to recognize our colleague from Florida, the Honorable Clay Shaw, a friend of the committee and one who, I am sure, has a few words to tell us about the agricultural concerns of his home State.

Mr. SHAW. Thank you, Mr. Chairman.

By the way, it is the orange blossom not the cactus and not the cornstalk.

I want to speak briefly with you this afternoon. I have a full statement that I would ask to become a part of the full record so that I might be brief in my remarks.

What I want to talk to you about this morning is something that is an ongoing project before you. It is one that is tremendously important. What I am again requesting is this subcommittee increase, the budget of the Agriculture Research Service, by $900,000 and include the record language that directs this money to be used specifically for the eradication of a noxious weed which is called Melaleuca and other noxious weed research as part of the Biological Aquatic Plant Management Laboratory of Davie, Florida, which is directly west of the City of Fort Lauderdale.

Biocontrtol methods are necessary but may not become fully operational, until at least 1997. To facilitate this initiative, I am also asking for an increased funding of APHIS by $1.6 million and to also include in the report language that this money is earmarked for the funding for the Melaleuca.

Mr. Chairman, just to summarize the importance of this, in March of 1992, we were successful in having the Melaleuca added to the noxious weed list.

This Melaleuca was imported originally into the State of Florida right around the turn of the century. It is a tree that grows so fast. Right now it is estimated that the acreage in Florida is increasing at the rate of 50 acres a day. It grows so densely that neither man nor animal can even get into these forests. It offers nothing in the food chain. And to make things worse, it is taking over parts of the Everglades including our Everglades National Park. Furthermore, this tree absorbs approximately five times the water that the prairie grass or the saw grass, (natural to the Everglades), takes in.

The depletion of the water supply is becoming rather significant at this time. With the continuous spread of it, it has been estimated that approximately half of the Everglades may very well be covered by the melaleuca by the turn of century if we don't do something significant.

The biocontrol that we are asking for is to import some insects, mainly from Australia, to do some experimentation in a quarantine facility that would be located right in the area of Broward County, Florida. There are two insects, they know, will eat the melaleuca and, therefore, help control it.

This is an extraordinarily serious problem. It is not only affecting the water supply of south Florida which, of course, has got to

be my number one priority and concern, but also—which should be of great concern to all of us—is the danger that it is threatening to cover the Everglades National Park, which could really mean this is the first national park that becomes extinct by way of a tree that was actually brought into the country as an exotic plant and is really out of control.

So I would ask that this committee look very favorably upon my request.

Mr. DURBIN. Mr. Shaw, we are aware of this problem and have included it in at least our committee report language in the past. I thank you for your testimony.

I only ask you that, when some of our self-anointed friends get up and start mocking agriculture research, that you join our chorus and let them know that there are very serious things being done here, important to the entire Nation. And this is an excellent example of something that ARS is addressing, and we want to help.

Mr. SHAW. I will be in the front row of the choir.

Mr. DURBIN. Thank you.

Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman.

And, Clay, just because they can't pronounce it, doesn't mean its not dangerous.

Mr. SHAW. Melaleuca.

Mr. SKEEN. I share your concern. Thank you for your testimony.

Mr. DURBIN. I am sorry.

Mr. Thornton.

Mr. SHAW. I didn't see you sitting there.

Mr. THORNTON. We have a few noxious plants in Arkansas. Nothing that is quite as pervasive as this.

Mr. SHAW. The kudzu.

Mr. THORNTON. Kudzu is sweeping the countryside and is very difficult to control. And I certainly am in sympathy with your position and support your suggestion that we need language, perhaps, more to help provide controls.

Thank you.

Mr. SHAW. We get in more trouble by bringing plants into areas they are not supposed to be. And Florida, in the southeast, seems to be really the area that has been hardest hit with kudzu, the hydrilla, the melaleuca. I am sure we can sit here and make that——

Mr. THORNTON. It is just such a rich and fertile land that plants from other areas just go wild when they get there.

Mr. SHAW. And so do people.

Mr. THORNTON. Thank you, Mr. Chairman.

Mr. DURBIN. Thank you.

[The prepared statement follows:]

Statement of the Hon. E. Clay Shaw, Jr.
before the House Rural Development, Agriculture,
Food and Drug Administration,
and Related Agencies Appropriations Subcommittee
April 1, 1993

Mr. Chairman, I appreciate the opportunity to come and testify in support of a proposal that is important to me and to my constituents. The proposal to which I refer is to increase the budgets of the Agricultural Research Service (ARS) and the Animal Plant Health Inspection Service (APHIS) in order to specifically earmark funds for Melaleuca and other noxious weed research and eradication in Florida.

Both the ARS and the APHIS are investing financial resources to address a problem in Florida that is literally growing every day. I am referring to the noxious weed Melaleuca (Melaleuca quinquenervia), which is changing the fragile ecosystem in and around the Everglades National Park to the detriment of our water supply. The Everglades is on the brink of ecological collapse -- so sick it might soon be the first National Park to be considered environmentally dead. Already, the Big Cypress National Preserve and the Loxahatchee National Wildlife Refuge are seriously infested with this pest. Rampant, uncontrolled growth of the Melaleuca drains the Everglades' water without playing any significant role in the food chain. The prolific Melaleuca crowds out indigenous plants and wreaks havoc on the food chain that sustains animal life. It is turning a unique environment teeming with life into a dry, monospecific forest.

Melaleuca was introduced to Florida from Australia in the early 1900s. It was originally brought into Florida for several purposes: as a potential lumber tree, as a windbreak, as an ornamental, and to help dry up the Everglades, which was then considered a wasteland. Since it was introduced, Melaleuca has spread so rapidly throughout South Florida's native Everglades that it has become a serious pest. It now threatens to permanently replace and eliminate Florida's natural plant communities and the animals that live in them. Recent surveys of Melaleuca indicate that it infests between 400,000 to 600,000 acres in South Florida, with 80,000 acres being dense stands of the weed. These pure, monospecific forests of Melaleuca are often so dense that neither animals nor people can move through them.

Predictions of the spread of Melaleuca indicate that over 50% of the Everglades' wetlands would be infested by the end of the century. Officials from the Everglades National Park and the South Florida Water Management District have informed me that Florida loses an estimated 52 acres a day to Melaleuca.

Another serious problem with Melaleuca is that Melaleuca forests use four to five times more water per acre than do the sawgrass prairies which are usually found before Melaleuca takes over. The Everglades provides all of the water that supplies the Biscayne Aquifer, which is the primary water source for South Florida. With an already overburdened water supply, the addition of Melaleuca to the water recharge system of the Everglades may further lower our regional water tables, straining these already overused water supplies even more.

According to experts most acquainted with the Melaleuca problem, the best, long-range hope for control and suppression of serious, widespread pest plants like Melaleuca is an approach called "classical biocontrol." What is entailed with classical bio-control is a careful survey of insects, and sometimes pathogens, in the pest plant's native habitat, which in this case is Australia. Once it is determined that such insects exist, the ones deemed most promising are tested in their native habitat to be sure they only feed on the one species of plant you wish to control. It is then tested on native horticultural and ornamental plants that occur in the area where control is desired, in this case, South Florida.

Once the Australian testing is completed, the best insect species would be brought into strict quarantine in specially designed USDA facilities and retested using strict criteria to again ensure that these insects only eat Melaleuca. Only after this thorough testing are any of the insects released to begin their work. This approach comes from an understanding of the natural history and biology of a species and does not rely on a "high-tech" quick fix.

Although classical bio-control is not widely known to the general public, it is being used on an ever-widening basis to control exotic plant pests. For example, the Army Corps of Engineers last year released a biological control agent for waterlettuce, a floating aquatic plant which severely infests Florida. Waterlettuce interferes with recreation, navigation, irrigation, impedes water flow, interferes with water control structures, and acts as a detriment to the public health by providing harborage to certain mosquito larvae. The Corps already spends millions of dollars each year on the removal of exotic aquatic plants in Florida, such as waterlettuce. Hopefully this expenditure can someday safely be reduced when biocontrol agents fully take effect.

Currently a Melaleuca biocontrol project is under way at the Fort Lauderdale Research and Education Center in Broward County, Florida, called the Aquatic Plant Management Laboratory, which is under the direction of the ARS, an arm of the USDA. Testing in Australia has begun, and over two hundred potential insects have been identified. Two insects, the Melaleuca weevil, and the Paperbark sawfly, are promising candidates for introduction to this country. The USDA has brought these insects to Florida for further testing. Funding and support for this project is provided by USDA, the Army Corps of Engineers, the National Park Service, Everglades National Park, the Florida Department of Natural Resources, the South Florida Water Management District, the Dade County Department of Environmental Resources, the Lee County Division of Resource Management, and the Florida Department of Environmental Regulation.

Unfortunately, the major factor that is impeding progress to find a suitable insect to control Melaleuca is the slow pace of research because of a lack of funding a noxious weed control. It is my understanding that this particular program has not been increased in over a decade. Although funding for Melaleuca

bio-control research does have much broad-based local support, recently some donors have reduced contributions because of the poor economic climate. This decline in extramural funds, when coupled with reduced base support (because of inflation) from ARS, is slowing progress on implementation of insect biocontrols for Melaleuca. If this present funding trend continues, postponement of the introduction of insects that control Melaleuca may occur. With Melaleuca predicted to infest over half the Everglades by the end of the decade, funding needs to be increased if we are to turn the tide. Therefore, I am again requesting that this Subcommittee increase the budget for ARS by $900,000 and include report language that directs this money be used specifically for Melaleuca and other noxious weed research as part of the Biological Control Program at the Aquatic Plant Management Laboratory in Davie, Florida. This funding is urgently needed to accelerate the evaluation and subsequent release of Melaleuca biocontrol agents.

While biocontrol is the best long range method to control Melaleuca, in the short term we must work to reclaim some of the precious wetlands lost to this pest through chemical and mechanical controls. On one of my many trips to the Everglades with the South Florida Water Management District I had the pleasure to kill a Melaleuca. First I girdled the tree with a machete and then I sprayed herbicide into the cuts. This is the most common way of killing individual trees.

Unfortunately, Melaleucas grow so densely, and are so widespread in remote parts of the Everglades, and the process of killing them so tedious, that it will be a long time before Melaleuca no longer constitutes the threat it does today. However, until biocontrol methods become fully operational, which is not expected even under ideal conditions until at least 1997, manually killing Melaleuca to staunch their spread is what we must do. Therefore, I request that this Subcommittee increase the budget for the APHIS by $1.6 million, and include report language earmarking these funds for Melaleuca eradication.

Mr. Chairman, I have been actively involved with the Melaleuca issue, and the problem my home state faces because of noxious weeds, since 1989. I have attacked this problem on many fronts, and progress had been made. Most notably, I am pleased to report to the Subcommittee that after over two years of negotiations with the USDA, my request to add Melaleuca to the Federal Noxious Weed List was approved on March 13, 1992. I was supported in this effort by the entire Florida delegation and numerous environmental and governmental groups in Florida. Melaleuca was the first such weed in at least 12 years to be designated a federal noxious aquatic weed. While I am pleased that Melaleuca is now recognized by the federal government as a threat to Florida's native ecosystems, we in Congress must continue to assist in this battle however we can. Fully funding my requests for increases in the budget for the ARS and the APHIS is the most logical and urgent step we can do right now.

Finally, Congress passed at my request a $250,000 appropriation as part of the FY91 Energy and Water Development Appropriations bill. These funds were used to develop a plan to construct a Melaleuca biocontrol quarantine and research facility in Florida. Included in the Water Resources Development Act of 1992 was a $1 million authorization for the quarantine facility that passed the House September 23, 1992.

As your colleagues who serve on the Energy and Water Development Appropriations Subcommittee are well aware, another impediment to progess in controlling Melaleuca is the lack of a biocontrol quarantine facility. The Aquatic Plant Management Lab presently shares a quarantine facility at Gainesville, Florida with the Florida Department of Agriculture and the University of Florida at Gainesville. However, the Gainesville facility is far from the main infestations of Melaleuca and facility space specifically to quarantine insects to control Melaleuca is limited. To rectify this situation, I testifed yesterday before the Energy and Water Development Appropriations Subcommittee to seek appropriated funds for the $1 million authorization to construct the biocontrol facility. This facility would not be dedicated soley to Melaleuca but also to biocontrol of other important noxious weeds, such as the Brazilian pepper and the Australian pine.

Mr. Chairman, let me state that experts have told me that the second greatest threat to the Everglades is posed by the invasion of exotic plants, and Melaleuca is the number one invasive plant (water quality and quantity problems are the first). Finally, almost a century after Melaleuca's introduction to Florida, a remarkable coalition including Congress, federal agencies, state agencies, county agencies, concerned scientists, and environmentalists have coalesced to fight this threat head-on, instead of piecemeal. Congressional support is needed to demonstrate that the Federal Government is indeed serious about this threat. Clearly, the costs for modest increases in the budgets for the ARS and the APHIS seem low when compared to the impending losses, and especially the damage that will be caused to Florida's jewel, the Everglades.

MIDWEST PLANT BIOTECHNOLOGY CONSORTIUM

WITNESS

DORIN SCHUMACHER, PRESIDENT CONSORTIUM FOR PLANT BIOTECHNOLOGY RESEARCH, INC.

Mr. DURBIN. Dr. Dorin Schumacher with the Midwest Plant Biotechnology Consortium.

We have your statement for the record, if you would like to summarize at this point.

Ms. SCHUMACHER. Thank you, Mr. Chairman, Members of the subcommittee. Thank you for the opportunity.

My name is Dorin Schumacher. I am President of the Consortium for Plant Biotechnology Research. This is a partnership of world class universities and companies who have come together to do the research required to meet United States agriculture needs.

How will the Consortium do this? Here I am going to talk a little bit about corn. Corn plants. One example of this is that researchers are working on improvements on corn which will enable both the producers and the processors to obtain more value from each bushel. This goes from improving the disease and the insect resistance of the plant to producing a higher quality protein in the corn and a higher usable starch content.

We are also working on other important crops. That is the type of research we are doing, and that is the type of impact that plant biotechnology can have on every day problems. We will bring that kind of progress to our agriculture needs and needs that can be met from plants to help farmers and the rest of the American public.

This kind of work cannot be done by industry alone. Large corporations, no matter how big they are, don't have all the answers. But the Consortium harnesses the capability of world class research universities with companies to focus on solving agriculture problems with practical applications.

So we are bringing these university intellectual resources out of the ivory tower into the real world to address applied problems. Universities and companies working together, can get there faster, sooner, and better.

How does the Consortium select its research projects? Through a competitive process. Projects are first screened by the member companies for their potential for meeting U.S. agriculture needs. And then they go through a very rigorous peer review process.

Now, our process is modeled after the peer review that is used by the National Science Foundation and the National Institutes of Health, USDA, competitive grants. We use the same procedures, the same reviewers, the same distinguished academic scientists who serve on our panels that serve on the Federal agency review panels. This competitive process insures that only the highest quality research, with the greatest potential for industrial application to meet U.S. agriculture needs, is funded.

The Consortium requires that Federal dollars be matched one to one with non-Federal dollars. Of the 26 projects that we funded, the 1992 projects, for every dollar you put in, you get back $2.16 worth of research.

Industry is investing 50 percent of the matching funds; and with these projects, the 1992 projects, we had 22 companies supplying matching funds. And we are working with them to transfer the technology out of those projects. Now, it is interesting that the matching percentages are increasing.

Three years ago, we had industry supplying 30 percent of the match; the year after that, it was 44 percent; it has risen to 50 percent of the matching which means that industry is finding this program a real benefit even in a time when resources are very tight in the companies.

The Consortium also allows small businesses to get involved in research. And while we have a lot of large corporations, one of our strongest supporters is a small businessman who is here today. I would like to introduce to you Larry Russo of the New Energy Company of Indiana. He is a member of our secretariat and our board of directors. And he is so enthusiastic about this program, he has flown here at his own expense to meet some of the Members and to hear my testimony.

The Consortium is undergoing important changes. One, a week ago, which was the former Midwest Plant Biotechnology Consortium, became the Consortium for Plant Biotechnology Research, an independent, incorporated entity.

We see many advantages to this step that will enhance the competitive aspects of our program, introducing impartiality into the process and insuring that our process is placed above scrutiny. We see other administrative advantages, such as possibly controlling administrative costs. But this is the same program with the same mission and the same message.

The Consortium is so successful that there is a tremendous desire for participation from around the country. And there is pressure from industry to include more researchers.

So, therefore, we are requesting an appropriation of $5 million in 1994. We can support a lot more projects.

Thank you for this opportunity to discuss this highly successful Consortium.

Mr. DURBIN. Thank you for joining us, Dr. Schumacher. We supported your efforts over the years. You have many friends and advocates on this subcommittee and throughout Congress.

Let me ask you a couple of questions. Everywhere I turn, people are talking about biotechnology and biotech research. I think it is very valuable, and I think it is going to revolutionize a lot of things that we do in this country, the way we grow crops and what is available for our families at the table and other places.

But tell me what kind of exchange of information is going on in these biotech research efforts?

How do you profit from what is learned by some other biotech research either at the Federal Government level, or at other universities?

Is there a free exchange of these ideas?

Ms. SCHUMACHER. Yes. All of the projects are required to present reports on their results at our annual symposium. And the investigators get up and present their ideas that they want to carry out in the form of posters, which is kind of unique, usually. When they do

posters, it is work already done; but there has been an education involved. So they do that at the symposium.

They get an answer on a one-to-one basis; they get to discuss the project and maybe shape it a little and make sure it meets the needs of the company, and the company puts in matching funds.

And after they have done their work, they come in and present their results to the whole group. And this is an open, public meeting.

Also they publish in the open literature. But the technology—the rights to the technology are worked out between the investigator's university and the company, in terms of the licensing and the patenting and so forth and in the commercialization of it.

Mr. DURBIN. Give me some ideas of what you have come up with during the life of this endeavor, practical things.

If I am in my town meeting in Bunker Hill, Illinois, and they say, "Congressman, why would you spend $5 million on something called a Consortium on Biotechnology Research? What difference does it make in our lives?"

Ms. SCHUMACHER. One of the projects is a cheaper way to make high fructose corn syrup which will make the Pepsi that you buy cheaper. All the products that use high fructose corn syrup can be cheaper for the consumers.

They are producing plants that are insect resistant, which means that fewer pesticides need to be used, which means there is an effect on the environment. It is better for the environment. Plants that are more pesticide resistant means that you don't have to apply as much pesticide to the field. It is cheaper and safer for the farmer because use of these pesticides is dangerous, as I know you know.

There are improvements in corn, for example, in making a more complete protein, more complete protein in soybeans, which means that becomes a substitute for red meat, perhaps, a more healthful substitute, a better food for animals.

Mr. DURBIN. Thank you.

Ms. SCHUMACHER. That is the kind of thing we are doing.

Mr. DURBIN. I appreciate it.

Mr. Russo, thank you for coming. We are impressed by the fact that you took the time to come out here and join us today.

Mr. Skeen?

Mr. SKEEN. Just one comment, Doctor. I know there is a wide variety and diversity of biotech research that is going on in this country today, and I think it is the future of our agricultural system. I am very much interested in how you incorporated this thing.

Does it have anything to do with trying to facilitate tech transfer into the marketing world as well?

Ms. SCHUMACHER. Well, we think this will have that effect. Before, this was an unincorporated group of people who came together and were interested in working together. We felt, by incorporating and being independent, we would be able to make sure that our peer review process was an impartial one and it would survive any kind of scrutiny.

We also felt that we would be able to do this in a very streamlined fashion and perhaps reduce the overhead costs in the whole program so more money can go into the research projects.

Mr. SKEEN. I think it is progressive from just the outside looking in, because I think when we get science closer to the market, then we have really got an advancement going on.

Ms. SCHUMACHER. And the corporations were very supportive of doing this, and they felt this would be an opportunity to do some kind of innovative things in terms of technology transfer. And if we can make the organization more streamlined, we can spend more of our energy on innovation and less of our energy on bureaucratic procedures.

Mr. SKEEN. We appreciate that, too, because being one of the instruments that originate as much bureaucratic interference as we could possibly get into the mainstream of this thing and Congress is a part of that. We appreciate somebody that is trying to take it out. Thank you.

Ms. SCHUMACHER. Thank you, Mr. Skeen.

Mr. DURBIN. Mr. Thornton.

Mr. THORNTON. Thank you very much, Mr. Chairman.

Dr. Schumacher, does your corporation have the capacity to patent discoveries?

Ms. SCHUMACHER. We don't at this point. Perhaps–I mean that is something that will be under discussion in the future.

Mr. THORNTON. I was wondering if that was a reason why you were moving toward a corporate existence?

Ms. SCHUMACHER. It is going to be a tax exempt—a private, not-for-profit, 501(c)(3), tax-exempt corporation like a foundation. But I think this whole question of——

Mr. THORNTON. Yes.

Ms. SCHUMACHER [continuing]. Intellectual property rights——

Mr. THORNTON. Intellectual property rights are very important. I come at that question from the standpoint that the patenting of intellectual property is desirable, that a public patent is worth nothing because it does not provide exclusivity in the technology transfer. And I was hoping that your answer would be, yes, that you were moving in that direction.

Ms. SCHUMACHER. Yes, we are.

Mr. THORNTON. With regard to private membership in the organization, I would think that they would have to have some protection for the intellectual property that they bring to the table; is that not correct?

Ms. SCHUMACHER. The corporations, yes. And they are very interested in this change in the structure of the organization. They have supported it overwhelmingly with their vote to do this. We have an interesting pattern of matching in the Consortium. There are some projects that are more basic where the companies want access to the corporation. You may see it is 10 companies putting smaller amounts of money into one project, and this is work that companies can't do themselves; they simply don't have the capacities for it.

And then, in some of the more applied projects, you may see one company saying, "I want to match this project. I don't want anyone else involved in this because I want to make sure that we have the intellectual property protection so we can take this to the marketplace."

Mr. THORNTON. Taking the intellectual property to the marketplace is the goal?

Ms. SCHUMACHER. Yes.

Mr. THORNTON. Sometimes that is misunderstood. There are those who think that acquiring a patent chokes back research and discovery, and that is not the case at all. It encourages the disclosure of an invention by rewarding the inventor for a period of time with exclusive use which can be licensed broadly or specifically.

Ms. SCHUMACHER. That is exactly right.

Mr. THORNTON. Thank you.

Thank you, Mr. Chairman.

Mr. DURBIN. Thank Mr. Thornton.

Dr. Schumacher, Mr. Russo, thank you for joining us today.

[The prepared statement follows:]

CONSORTIUM FOR PLANT BIOTECHNOLOGY RESEARCH
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TESTIMONY

Agriculture, Rural Development, FDA, and Related Agencies

Subcommittee on Appropriations

United States House of Representatives

April 1, 1993

SUMMARY OF REQUEST: The Consortium for Plant Biotechnology Research supports competitively selected research projects for research and technology transfer in plant biotechnology. The Consortium requests $5 million in FY 1994 to support the continuation of projects started in 1993 and new starts in 1994.

Dr. Dorin Schumacher
President
Consortium for Plant Biotechnology Research, Inc.
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Mr. Chairman, members of the Subcommittee, thank you for the opportunity to testify. My name is Dorin Schumacher and I am President of the Consortium for Plant Biotechnology Research, formerly the Midwest Plant Biotechnology Consortium. The Consortium was organized in 1985 to carry out research and technology transfer that would enable companies to utilize agricultural products as new and improved sources of chemicals, pharmaceuticals, and energy. In 1993, it was incorporated as the Consortium for Plant Biotechnology Research, Inc.

The Consortium harnesses world class university plant biotechnology research capabilities with industrial applications to develop improved crops and cropping practices. The result will be improved-cost-effective agricultural technologies for the nation. The Consortium now comprises 18 major research universities, 33 companies and trade associations representing another 150 companies, and several federal laboratories.

In its appropriations for fiscal years 1989, 1990, 1991, and 1992, the Congress appropriated a total of $10 million for the research and technology transfer program of the Consortium. With these funds, the Consortium has been able to conduct four competitions and start up four groups of research projects in plant biotechnology–a total of 67 projects. Two groups have ended their first year of research, one group is beginning their second year, and the fourth is just starting their first year.

The appropriation for fiscal year 1993 was $2.8 million. On behalf of the Consortium's 180 participating companies and 19 member universities and research institutes, I express our appreciation for your support. A management proposal for the use of the 1993 funds has been submitted to USDA, and approval is expected soon. Officials of the Department have been most helpful and cooperative.

Plant biotechnology has the potential for invigorating and diversifying the agricultural economy. The goal of the Consortium for Plant Biotechnology Research is to bring together industry, universities, and federal laboratories to conduct research in plant biotechnology that will: 1) utilize agricultural products as new sources of chemicals, pharmaceuticals, and energy; 2) reduce the cost of crop production, thereby increasing the competitiveness of U.S. agriculture in world markets; 3) improve the utilization of existing crops; and 4) develop an agriculture that is safer in its impact on the environment.

The newly emerging field of plant biotechnology provides numerous opportunities to improve the agricultural base of the United States which has made our country so strong, to increase the competitiveness of U.S. agriculture in the world market, to develop new products and open new market opportunities for future growth of existing companies or the beginning of new businesses, to help the small farmer as well as large agribusiness, to make agricultural production more environmentally safe and to increase job opportunities in the public and private sectors. This area of research is already facilitating the development of improved crops, providing improved crop varieties, and new products.

The United States is number one in the world in the quality of its university basic research. But, all too often, the results of this outstanding research do not get translated into solving society's problems. The Consortium for Plant Biotechnology Research is changing that by harnessing the research capabilities of world class universities to focus on solving plant-based problems with important industrial applications. Through the Consortium, the intellectual resources of our universities are being brought out of the ivory tower into the real world to solve applied problems. The work supported by the Consortium either would take much longer if done by industry alone, or would not be done at all. Industry simply does not have the research capabilities that America's great research universities have to bring to bear on these problems. University capabilities, however, as deep and accomplished as they are, have a tendency sometimes to pursue knowledge that is irrelevant to our pressing national needs. The strong corporate involvement in the Consortium helps to keep the projects we fund with this money in close touch with the search for practical solutions to our national agriculture problems.

The concept behind the Consortium has been enthusiastically supported by industry, universities, and federal laboratories alike. All parties involved see new technology as a key component in the success of American competition in a global marketplace. Federal funding of the Consortium insures that information developed through the Consortium's research program is disseminated to the public where it will be used for the public good.

A unique strength of the Consortium is the highly competitive process it uses to select research projects. The selection process combines rigorous peer review with built-in technology transfer through industrial member involvement. Proposed research projects are screened first by company members of the Consortium to assess their promise of significant benefits for US. agriculture needs. Projects that survive industrial screening are peer reviewed for scientific merit through a process modeled after the competitive grant programs of the National Science Foundation, the National Institutes of Health, the Department of Energy, and the Department of Agriculture. The Consortium uses as peer reviewers distinguished academic scientists who serve on federal research agency review panels. Final project selection is made by the corporate members of the Secretariat, the Consortium's scientific advisory board, with input from at least two renowned academic scientists from non-member universities.

The Consortium's thorough research project selection process insures that only the highest quality research with the most potential for industrial applications to meet U.S. agriculture needs is funded. Research supported by the Consortium has produced many significant scientific and technological advances. New techniques have been developed to identify useful genes in crops and to facilitate their transfer to related varieties and hybrids. These technologies have been very useful for plant breeders in both the public and private sectors to increase the efficiency of producing new and improved varieties and hybrids in crops such as corn. Research supported by the Consortium has been successful in identifying novel genes and gene products for developing new approaches to control insects, fungal diseases and viruses. Another area of Consortium research is the development of methods to alter the

quality of crops such as corn, for instance, increasing nutritional quality or potential processing characteristics and producing and extracting novel products such as biopharmaceuticals like insulin, human growth hormone, and interferon in genetically-engineered plants. Consortium-funded scientists have developed methods to alter the nutritional quality of plants and to incorporate value-added traits through plant biotechnology. Other scientists are developing methods to produce and extract high-value proteins and biomedicinal peptides in plants.

The Consortium for Plant Biotechnology Research, formerly the Midwest Plant Biotechnology Consortium, was formed to facilitate the development of research in plant biotechnology in academia and to enhance the transfer and application of this technology to the private sector so it can be brought to the marketplace. The Consortium provides mechanisms for U.S. agrichemical, pharmaceutical, and seed companies to stay on the cutting edge of this rapidly changing, highly competitive technology by establishing a mechanism for the flow of new technology and novel genes into the process of commercial development, production and marketing. The Consortium provides for the small businesses that cannot support costly R&D programs, allowing them to tap into this flow and participate in the commercial application of plant biotechnology, and thereby, to reap the benefits of this virtually limitless resource for future economic growth and development. The industrial partners in the Consortium are already putting some of these technological breakthroughs, such as genes for insect and virus resistance, into the pipeline for commercial development and evaluation. In other cases, large and small companies alike are applying the fundamental techniques of plant transformation, cell and tissue culture, molecular biology for plant breeding developed in academic institutions as part of the research funded through the Consortium. The Consortium has facilitated the development of new technology, commercially important products and inventions, and technology transfer as well as a closer cooperation between academia and industry that will be essential for the future economic growth and development of the United States.

Twenty-six projects were selected through the Consortium's fourth competition, held in 1992. The Consortium requires that federal funds be matched at least equally with non-federal funds. The commitment of industry to technology transfer of the results of the Consortium's work can be seen easily by its allocation of matching funds for these excellent and innovative research projects. The matching of federal money with industry funds demonstrates private sector recognition that the program works. The total non-federal matching for the 1992 projects came to a total of $2.26 million, 116 per cent of the federal funds awarded, for a total of over $4 million in funding. Half of the matching came from industry (from 22 companies/trade associations). These corporate commitments increase the effectiveness and impact of federal research dollars. The companies and corporate associations that made financial commitments totaling more than $1 million include: U.S. Biochemical Corporation, Monsanto Company, The Quaker Oats Company, CIBA, Cargill, Inc., DowElanco, LiphaTech, Inc., Entotech, Inc., Agrigenetics, Pioneer Hi-Bred International, Inc., Anheuser-Busch Companies, Inc., Garst Seeds, Northrup King Company, Upjohn Company, The Procter & Gamble Company, H.J. Heinz Company, and Callahan Enterprises. Other organizations and associations providing matching include state governments, the

Kansas Wheat Commission, the Mid America Processor Association, the American Malting Barley Association, Public Varieties of Indiana, and the Ohio Soybean Council. The continued cooperation of industry and the federal government in funding this program will contribute to the economic strength of agriculture in the United States.

The competition for 1993 projects is currently underway; project selection will be made in May.

The Consortium for Plant Biotechnology Research is the organizational mechanism that links players in plant biotechnology and coordinates their functions in order to bring about the efficient transfer of new knowledge and new technologies from the laboratory to the marketplace. The program has received high marks from both industry and the great research universities. This successful organizational structure, these member organizations, this motivation and talent are now being used to bring R&D resources to bear on improving the agricultural enterprise. At the administrative level, the Consortium has incorporated this year into a tax exempt, not for profit corporation, and changed its name from the Midwest Plant Biotechnology Consortium to the Consortium for Plant Biotechnology Research, Inc. We are the same program, however, with the same mission and same members.

We thank you for the support you have provided in the past, and request a 1994 appropriation of $5 million so that the research program can grow and so that the 1993 year projects can be continued and new projects can be started up. Speaking on behalf of my industrial colleagues, we believe that the Consortium's program is critical to helping develop and maintain the strength and competitiveness of U.S. agriculture.

Thank you very much for this opportunity to discuss with you this highly successful Consortium program.

REGIONAL AQUACULTURE CENTERS

WITNESS

C.G. SHEPHERD, SOUTHERN REGIONAL AQUACULTURE CENTERS

LESTER MEYERS, PRESIDENT AND GENERAL MANAGER OF DELTA WESTERN IN INDIANOLA, MISSISSIPPI

Mr. DURBIN. Mr. C. G. Shepherd from the Southern Regional Aquaculture Center.

Mr. Shepherd.

Mr. SHEPHERD. Thank you, Mr. Chairman. With the committees indulgence, I would like to submit our written testimony for your consideration and for the record, not only from the Southern Region but from all five of the regional centers.

And the other regional center directors are in the audience but will not be appearing on the panel. I would like to also deviate and just make a few comments from my point of view and then ask our industry representative Lester Myers here——

Mr. DURBIN. Mr. Myers, welcome.

Mr. SHEPHERD [continuing]. To give you an industry perspective, as we feel like this has been certainly a very important part of these regional center programs.

We appreciate the opportunity to appear before you again on behalf of the five regional centers. These programs are relatively new, starting in 1987 and 1988. Thus far, we have had, approximately, 60 research and extension projects that have been activated, some of which have been completed; and we feel like a number of products have come from these programs.

One of the key factors, as we see it, that is a little different from some other activities includes significant input from our industry counterparts; and it involves input from both research and extension in the development of our projects. The bottom line, of course, in our written testimony, the current level of funding-appropriate level of funding is $4 million. The authorized level is 7.5 million, and we would beg the committee's consideration for the full level of funds, funds permitting, of course.

As I said, one of the key points that we feel like have come from our program is the input of working with industry. And in all five regions, the industry representatives have quite an input in the development of our projects.

And I would like, with your permission, to call on Mr. Myers at this time to speak to you as an industry representative from our region in the south.

Mr. DURBIN. Welcome, Mr. Myers.

Mr. MYERS. Mr. Chairman and other Members of the subcommittee, thank you for letting us present testimony.

My name is Lester Myers, and I own a catfish farm near Inverness, Mississippi. And I am also President and General Manager of Delta Western in Indianola, Mississippi, the largest catfish feeding mill in the United States.

It has also been my pleasure to serve as Chairman of the Industry Advisory Council for the Southern Regional Aquaculture Center since it began operation in 1977.

Those of us representing the aquaculture industry throughout the U.S. have been impressed with the programs of the Regional Aquaculture Centers. Their structure provides opportunities for producers at grassroots level to have direct and significant inputs into these programs including identification of key issues that are critically important to the industry. Through this procedure, research and extension scientists learn firsthand what it needs to keep us in business. We commend the foresight Congress had when they authorized the establishment of the Regional Aquaculture Centers.

Throughout the United States, thousand of aquaculture producers depend heavily on information from aquaculture scientists. All segments related to our industry must rely on up-to-date research information if U.S. aquaculture is to reach its maximum potential. In 1992, the Joint Subcommittee on Aquaculture estimated the values of U.S. aquaculture production as follows: catfish, $452 million; trout, $70.8 million; baitfish, $55 million; crawfish, $37.1 million; ornamentals, $53 million. All of these species are grown in our region. Nine other species grown in the United States have an estimated combined farm value of approximately $176 million. However, all producers are facing serious economic problems. The high costs of production, low prices of products sold, and our nationally depressed economic conditions require much more technological information be available to producers and processors. Lower production cost is absolutely essential.

Several of the multi-year projects recently completed by the regional centers have provided much useful information on nutrition, reproduction, marketing strategies, water quality management, and disease prevention, as well as other important phases of production. Information developed from these studies are currently being disseminated by educators through on-farm demonstrations and regional workshops. Numerous publications and videos are also available which provide excellent support information for all aquaculturists.

Through the center programs in the southern regional area, we have completed seven multi-year projects and, in turn, have seven ongoing projects, most of which are three-year duration. These include studies on the effects of nutrition on product quality, harvesting technology that can reduce production costs on catfish and crawfish, quality assurance on aquaculture products, development of new educational materials for beginning and experienced producers, and avian predator management.

The U.S. aquaculture industry has benefited tremendously in these efforts, as well as from the projects initiated each year. Some of the other projects are going on in the other five regions.

The level of funding, as Dr. Shepherd has said, of the five regions-the authorized level is $7.5 million. The total appropriated for 1993 is $4 million or $800,000 per region. We strongly request consideration of the 1994 budget of the full $7.5 million full authorized funding for the five Regional Aquaculture Centers. We genuinely appreciate this and other valuable support you have done for the aquaculture industry.

Thank you for letting me give testimony.

Mr. DURBIN. Thank you.

Dr. Shepherd, what kind of market penetration have we been able to come up with with domestic raised fish? I know we import some. People say it is 90 percent. I read 70 percent in the testimony here.

Are we making any progress? As Americans eat more fish, are they getting more American-raised and grown fish?

Mr. SHEPHERD. Mr. Chairman, I believe the answer to your question would be we are making progress. One of the first studies we had in this other region, it did involve a market analysis-and in the U.S., of course-there are areas that are-that do have possibilities for expanded marketing capabilities.

In particular, this was dealing with catfish and crawfish, but more products are being produced in aquaculture. But a bit of the problem here, from the standpoint of production costs, have also been lowered, as Mr. Myers referred to here.

And so, for this to continue as far as aquaculture production increase in this country, it will take additional work as far as expense components. But I think the marketing penetration aspect that you mentioned, the potential is there. Areas of the country, for expanded marketing, do exist. And that was a surprising finding to us in our first study.

Mr. DURBIN. Mr. Myers, what kind of folks get in the aquaculture business? Are they farmers or business people? What kind of backgrounds?

Mr. MYERS. My history is in the fish-growing business. We are in the cotton growing business; we have rice; we have soybeans and cattle. Now we have fish. Fish on some marginal production soil, heavy clay soils, is perfect to grow catfish on. We had some of that. South County has plenty of clay soils.

We use catfish and come out of the catfish ponds and work 500 or 600 acres of rice out of it. The bulk of the industry is farms. We have a few limited partnerships in there, but they just are not hard-core farmers.

Mr. DURBIN. So the farmers that are involved in it, are they, like yourself, doing other things on the farm? They are not exclusively raising catfish.

Mr. MYERS. There are very, very few exclusively catfish farms. Just like very few exclusive cotton farms in our area. They grow cotton along with other crops. We just happen to grow about four different crops on our farm.

Mr. DURBIN. I take it there is some profitability in this venture, in raising catfish?

Mr. MYERS. It is. Last year we went below production because we are selling fish at 48 to 50 cents. To break even, on the average size fish farm, is approximately 60 cents.

Presently, we are getting 70 cents for fish now. At market, we kill about 490 million pounds of fish, catfish in Arkansas, Alabama, Louisiana, Texas, Mississippi area last year, that grew about 11 percent; and we have been growing every year. Our sales are up right now.

We have a critical time for the next two months. We probably will kill more fish than we have grown. We are going to be extremely tight in inventory, which is good for the farmer. We need to clean out ponds every now and then.

Mr. DURBIN. I don't have to tell you, you have a friend in the Department of Agriculture. He has been sitting next to me for six years, and I heard about catfish almost every day. I am sure Secretary Espy hasn't forgotten where he has come from.

Mr. MYERS. He has been real good for our industry, too.

Mr. DURBIN. He is the best.

Mr. Skeen?

Mr. SKEEN. I am a great admirer of your industry. Just talking about catfish, my mouth starts watering, especially when they put pecans on it.

Mr. MYERS. The per capita consumption is .08. That is, all you have to do is eat one more time, and we double our industry.

Mr. SKEEN. Let me ask you, Where is your biggest market? Who do you market to? Who are the intermediaries, is what I am interested in?

Mr. MYERS. There are probably 15 processors in the industry.

Mr. SKEEN. That you sell to?

Mr. MYERS. That we sell to. My farm, I sell to two or three processors, mainly Delta Pride which is a large co-op, which about 200 farmers own Delta Pride. It is the largest processing plant.

Mr. SKEEN. What do you deliver to them?

Mr. MYERS. We deliver, preferably, a pound to two pounds fish; all live.

Mr. SKEEN. Live fish.

Mr. MYERS. Live fish. They are all live until they meet the head saw.

Mr. SKEEN. They do that at the processing plant?

Mr. MYERS. Yes. We try to seine our ponds three or four times a year, keep pulling different sizes off.

But the best of product activity is from a pound to two pounds, you get your best conversion rate. Anything bigger, the conversion goes down. Anything littler, you haven't fed him long enough to make any money off of him.

Mr. SKEEN. Will they dock you at the market if they are too big?

Mr. MYERS. We really don't have an established grading system in the fish industry yet. The big fish, this year the plant started anything above four pounds they were docking you a dime a pound on. But to have a grading system, we really need third-party grading. If you don't have third-party grading, it is sort of like letting the fox watch the henhouse.

Mr. SKEEN. We have got a lot of problems with foxes.

Mr. MYERS. I know it. And hopefully we can get—you know, the industry all of the processors in our area are in the Department of Commerce inspectors. Hopefully, that can move to USDA inspectors. I think that would be the best thing for the seafood world and aquaculture.

Mr. SKEEN. I think we had proposed something of that kind because fish consumption has gone up in the United States, and there has been no inspection system. But a lot of it is from imported sources.

Mr. MYERS. It really is.

Mr. SKEEN. That is probably one of your biggest competitors in the seafood market?

Mr. MYERS. It really is. We have grown tremendously, and we are going to continue to grow. Aquaculture is going to grow. They are going to fish the oceans out. They have proved they can do this.

Mr. SKEEN. This is a renewable resource. What is a respectable return per acre? Do you measure it that way? Or how do you measure your profitability?

Mr. MYERS. The average farm is producing about 6,000 pounds of fish per acre, five to 6,000 pounds of fish per acre.

Mr. SKEEN. Per year?

Mr. MYERS. Yes.

Mr. SKEEN. That is with the number of seinings that you do?

Mr. MYERS. That is correct. That would be anywhere, depending on the farm, how much debt service—some of them have too much—but you are looking at about a nickel a pound profit at that level. Nickel a pound, you are looking at $300 an acre. And you know, some publications have picked up some gigantic numbers. They need to talk to my banker.

Mr. SKEEN. You can't believe everything you read in the media.

Mr. MYERS. That is totally correct.

Mr. SKEEN. Thank you very much for your responses.

Mr. MYERS. Glad to be here.

Mr. DURBIN. Mr. Thornton.

Mr. THORNTON. Thank you, Mr. Chairman. I am sure you know of my interest in this area of aquaculture as well. We thought we had the market cornered until Mississippi got in on the act a few years ago and became the dominant and excellent partner and leader in the development of this important resource of a high quality and tasty food product.

I think, Mr. Chairman, often of how critics of Federal spending will seize upon a title. A few years ago, it was the William Proxmire Golden Fleece Award, which was given for things that just didn't sound quite right. And in Congress recently, we have had people attack Federal grants for fish farming research.

Now, they are missing something, aren't they, in attacking the kind of funding that is going on here? Doesn't this have a tremendously beneficial effect upon the economy of the area—upon providing jobs and upon a high quality food supply?

Mr. MYERS. That is totally correct. If it hadn't been for research in aquaculture, we would still be making a half a bale of cotton or 10 bushel soybeans or 60 bushel rice.

I have been in aquaculture since 1976; 2,500 pounds was a good yield in 1976. You will go broke doing that now. I have got some ponds that are producing over 10,000 pounds per acre, and it is nothing but research. And more and more research is going to help us increase productivity, therefore, getting food costs down.

The general public doesn't realize that they have got a bargain with food in the United States. And research done that.

Mr. THORNTON. Improving the feed to pounds of produced food ratio.

Mr. MYERS. That is correct.

Mr. THORNTON. That is a constant battle, isn't it?

Mr. MYERS. Like the lady was saying about corn, I added on some corn. Research is getting some of this corn with higher lysine values, higher usable feed ingredients. Probably catfish feed and

poultry feed, probably, has the best feed conversions right now. And we can increase that.

The company where I manage the feed mill, we have a research farm doing nothing but nutrition work. We have found on this—all the research facilities we have looked at are actually getting better feed conversion on research facilities than we were when we carried the practical application on commercial farms.

We have got to do a better job of distributing the methodology of feeding fish, something we really overlooked. We can't catch a fish right now. Right now there is work being done on techniques on seining and harvesting. We got them in the water. We can catch 85 percent of them. But 10 percent, when we catch him, again, he has got extremely poor feed conversion.

Mr. THORNTON. While Mississippi State University is, really, the acknowledged leader in this particular area, the center at Pine Bluff has a very strong program in aquaculture, especially in addressing some of the problems relating to controlling disease and the breeding of the fish itself.

Are they involved, in any way, with your programs in Mississippi?

Mr. SHEPHERD. Yes, Mr. Thornton. They have been involved in a number of our projects and will be. We are working on two new projects in the southern region right now, and they will be involved in both of those.

And, incidentally, one deals with nutrition; and another one deals with pond cultural practices. And it will include—and I couldn't go back to the south without at least acknowledging this, we have mentioned it here—will include activities on baitfish. And I know that is an important industry in your State.

Mr. THORNTON. There are a number of fish farmers in Arkansas who would have been very disappointed if we hadn't mentioned the importance of baitfish.

Mr. SHEPHERD. They have let me know already.

Mr. THORNTON. Thank you very much.

Mr. Chairman.

Mr. DURBIN. Mr. Myers, what do you feed these catfish now?

Mr. MYERS. Feed. You probably grow the number one product in that range.

Mr. DURBIN. I was thinking I want to hear this. Corn or soybeans?

Mr. MYERS. Corn. You are getting a little competition in soybeans. We have done lots of research with cottonseed meal. This year it is not economical to use cottonseed meal. Soybean meal is the highest ingredient followed by corn. You grow both of them.

Mr. DURBIN. Now you are talking.

Thank you very much for joining us. We appreciate it.

[The information follows:]

Testimony Before

THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES 1993

Concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

Written Statement By

DR. C. G. SHEPHERD, DIRECTOR
SOUTHERN REGIONAL AQUACULTURE CENTER
STONEVILLE, MISSISSIPPI

Mr. Chairman, and Members of the Subcommittee: We would like to express our sincere appreciation for the opportunity to offer testimony on behalf of the five Regional Aquaculture Centers. Aquaculture continues to be a growing part of the U.S. economy, and the support this Subcommittee and other members of Congress provide for work to assist and improve this industry has been most helpful.

The Regional Aquaculture Center programs were authorized by Title XIV of the Agriculture and Food Act of 1980 and the Food Security Act of 1985 (Subtitle L, Sec. 1475[d]). The designated regions are Tropical/Subtropical, Western, Southern, North Central and Northeastern. Their programs coordinate aquaculture research and extension activities to enhance viable and profitable commercial aquaculture production in the United States for the benefit of producers, consumers, and the American economy. These programs complement existing research and educational programs by state and federal agencies. User inputs into development of the Center programs are assured since industry representatives participate in the decision-making processes via Industry Advisory Councils for each region. Technical expertise is provided by research and extension scientists serving on committees for each project developed.

The authorized level of funding for the Regional Aquaculture Centers is $7.5 million annually. The FY 93 appropriation was $4.0 million divided equally among the five Centers. We would like to request your support for the full authorized level of $7.5 million for these five Centers in FY 94.

A trade imbalance exceeding several billion dollars exists for U.S. fishery products. Aquaculture, with a current production value approaching a billion dollars, is one of the most rapidly growing segments of U.S. agriculture. However, there are many issues and problems facing the industry that must be addressed before the full potential for profitable production can be attained. Very useful information has already been developed from research and extension work supported by the Regional Aquaculture Center programs. This progress will continue if adequate funding can be provided.

In the Southern Region alone, seven multi-year research and extension projects have been completed. These dealt with a market analysis and marketing potential of catfish and crawfish, improved aeration techniques, disease prevention and development of nutritional programs to improve species performance and product quality as well as lower production costs, and improved harvesting and grading techniques for aquaculture producers. Scientists working on these projects completed approximately 150 publications and ten videos dealing with production practices to assist the industry. Over 1500 copies of these materials are mailed each month by the National Agriculture Library. This is in addition to the numerous requests for the publications handled by the Cooperative Extension Services throughout the U.S. Implementation of these newly developed practices is already underway.

Our ongoing projects appear to be equally promising. The project, "Characterization of Finfish and Shellfish Aquacultural Effluents", which was initiated in 1991, involved scientists from nine universities and one state/federal laboratory. The purpose of this three-year study is to characterize effluents from finfish and shellfish operations and to identify best management practices that are sound technically and economically. Information from this study will be used to develop educational materials to help fish farmers and regulatory agencies better understand the problems both groups face.

In 1992, two three-year projects dealing with quality assurance for aquaculture products were initiated. The project entitled "Safety and Sanitation of Aquacultural Products--Microbial" will focus on microbiological aspects to assure premium quality products and considers production, processing and marketing phases of catfish, crawfish and rainbow trout. The project entitled "Aquaculture Food Safety--Residues" is designed to identify real or potential problems, if any occur, and to help industry continue to insure that safe and quality products are in the marketplace. The overall goal of this effort is to develop a program that will assure quality and safety of

aquaculture products reaching the consumer. Initially, this work will include rainbow trout, crawfish and catfish.

Also during 1992, the Board of Directors approved two new project areas, i.e., "Improving Production Efficiency of Warmwater Aquaculture Species Through Nutrition" and "Delineation and Evaluation of Catfish and Baitfish Pond Culture Practices". These three-year projects will be developed through the Work Group method, and it is anticipated both will be initiated during 1993.

The Regional Aquaculture Center programs enable us to develop and coordinate aquaculture research and extension activities throughout the nation. Directors of the five Centers and USDA representatives work together to collaborate efforts among Center programs to address national aquaculture issues. We respectfully request that funding at the authorized level of $7.5 million be provided these extremely important and successful programs.

Thank you for the opportunity to submit our testimony.

Testimony Before

THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES
1993

Concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

Written Statement By

MR. LESTER W. MYERS, PRESIDENT AND GENERAL MANAGER, DELTA WESTERN, INC.
INDIANOLA, MISSISSIPPI

Mr. Chairman and other Members of the Subcommittee, thank you for the opportunity to present testimony on behalf of the five Regional Aquaculture Centers. My name is Lester Myers, and I own and operate a catfish farm near Inverness, Mississippi, and also am President and General Manager of Delta Western, Inc., Indianola, Mississippi, the largest catfish feed mill in the United States. It has also been my pleasure to serve as Chairman of the Industry Advisory Council for the Southern Regional Aquaculture Center since it began operation in 1987.

Those of us representing the aquaculture industry throughout the U.S. have been impressed with the programs of the Regional Aquaculture Centers. Their structure provides opportunities for producers at the grassroots level to have direct and significant inputs into these programs including identification of key issues that are of critical importance to our industry. Through this procedure, research and extension scientists learn first-hand what is needed in order for us to stay in business. We commend the foresight Congress had when they authorized the establishment of the Regional Aquaculture Centers.

Throughout the U.S., thousands of aquaculture producers depend heavily on information from aquaculture scientists. All segments related to our industry must rely on up-to-date research information if U.S. aquaculture is to reach its maximum potential. In 1992, the Joint Subcommittee on Aquaculture estimated the value of

U.S. aquaculture production as follows: catfish--$452 million; trout--$70.8 million; baitfish $55 million; crawfish--$31.7 million; and ornamentals $53 million. All of these species are grown in our region. Nine other species grown in the U.S. have an estimated combined farm value of approximately $176 million. However, all producers are facing serious economic problems. High costs of production, low prices for products sold, and our nationally depressed economic conditions require that much more technological information be available to producers and processors. Lower production costs are absolutely essential. Improved production practices to increase profitability of U.S. production will also help reduce our country's dependence on aquaculture imports.

Several of the multi-year projects recently completed by the Regional Centers have provided very useful information on nutrition, reproduction, marketing strategies, water quality management, and disease prevention as well as many other important phases of production. Information developed from these studies is currently being disseminated by educators through on-farm demonstrations and regional workshops. Numerous publications and videos are available from these programs which provide excellent support information for all aquaculturists.

Through the Center programs in the Southern Region, we have completed seven multi-year projects and currently have seven on-going projects, most of which are three-year duration. These include studies on the effects of nutrition on product quality; harvesting technology to reduce production costs in catfish and crawfish; quality assurance for aquaculture products from microbiological and residues standpoints; characterization of finfish and shellfish aquacultural effluents; development of new educational materials for beginning and experienced producers; and avian predator management. The U.S. aquaculture industry will benefit tremendously from these efforts, as well as from other projects that are initiated each year. Similar progress has been accomplished by each of the five Regional Centers.

In summary, those of us representing the aquaculture industry continue to feel that significant benefits are resulting from these Regional Center programs. The interest among U.S. aquaculture scientists to work cooperatively on projects developed by these programs has been exceptionally good, and they have produced

very positive results beneficial to our industry. We are convinced that additional valuable information will be forthcoming from these programs if increased funding is made available.

The authorized level of funding for the five Regional Centers is $7.5 million. The total amount appropriated for the Centers for FY 93 was $4.0 million or $800,000 per Region. We strongly request your consideration of the 1994 FY budget to provide the $7.5 million full authorized level of funding for the five Regional Aquaculture Centers. We genuinely appreciate this and other valuable support you have previously provided our industry.

We appreciate the opportunity to offer these comments of support for the Regional Aquaculture Center programs.

Thank you.

Testimony Before

THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES
1993

Concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

Written Statement By

Mr. Walter Landry, Past-President
Louisiana Aquaculture Association
Baton Rouge, Louisiana

Thank you, Mr. Chairman, for this opportunity to present testimony supporting the Regional Aquaculture Centers. My name is Walter Landry. I am a sugar cane farmer and aquaculture producer, and currently serve on the Board of Directors of the Louisiana Aquaculture Association (LAA), having previously served as President of that Association. I am also currently President of the Striped Bass Growers Association. My entire career has been based on agricultural production and related industries. With the assistance of aquaculture researchers and extension specialists from various universities throughout the southeastern U.S., I have successfully diversified my farm operations to include production of hybrid striped bass, redfish and catfish.

Now in its fourth year, the Louisiana Aquaculture Association continues to serve as a unified voice for producers of all aquacultured species within the state. Current estimates indicate that the production of aquaculture species provides direct income to approximately 7,000 persons in Louisiana. Over 15 species of fish and shellfish are produced on 150,000 acres of production ponds and 300,000 acres of water bottoms within the state.

The LAA has been recognized by the Louisiana Legislature through a joint resolution as the official representative of production aquaculture within the state. The founding goals of the LAA are, specifically, to 1) influence public policy for the advancement of aquaculture, 2) influence the direction and scope of government-funded aquaculture

research and extension, 3) promote the exchange of information among members, and 4) promote the sale and use of Louisiana aquaculture products. Clearly, based on these priorities, the LAA is extremely interested in the funding of the Regional Aquaculture Centers.

The importance of aquaculture to this nation now and for the next 20 years cannot be over-emphasized. Although per capita consumption of seafood has fallen in the United States from a high of 16.2 pounds in 1987 to 14.9 pounds in 1991, consumption of farm-raised seafood products continues to increase. As a result of increased productivity by both growers and processors, real prices for most aquaculture products have fallen during the past several years. This trend, largely a result of the efforts of government-funded research and extension, is expected to continue well into the future.

In contrast, wild-catch fishermen are facing reduced availability of stocks, either directly or through increasingly stringent harvesting quotas. Estimates indicate this nation realized a $2.6 billion trade deficit for seafood products in 1991. On a world-wide basis, the most recent global estimates available from the United Nations indicate that world fisheries landings declined in 1990, following 12 years of increases.

These factors will continue to increase the competitiveness of aquacultured products compared to wild-caught seafood. In competition with other agricultural animal commodities, one point which should benefit the industry in the future is the advantage of aquatic species over traditional animal industries in converting feeds into consumable protein, resulting in less solid waste and effluent for a comparable level of production.

Aquaculture's recognition by government officials and the general public as an agricultural enterprise was apparent in 1992 with its inclusion in a bill providing for federal disaster assistance and in the Emergency Conservation Program. States with little or no history of aquaculture production are finding they must develop aquaculture research and extension capabilities. The Regional Aquaculture Centers can fill this need in the most cost-effective manner possible.

The Regional Aquaculture Centers have proven to be an important basis for the continued success and expansion of this industry in the U.S. Industry has realized increased

benefits from the coordinated use of government funds through the Centers, through demonstration projects, fact sheets, extension bulletins, video materials and problem-solving research.

The aquaculture industry in Louisiana and throughout the country recognizes the generous assistance and support of this Subcommittee, including the current funding level of $4 million. Considering the increasing importance of aquaculture production in the U.S. during the next decade, we sincerely hope you will provide the fully authorized $7.5 million amount for the five Regional Aquaculture Centers in the FY94 budget. This funding will be absolutely necessary to keep the U.S. aquaculture industry competitive in a global economy.

Thank you for this opportunity to again offer comments of support for the Regional Aquaculture Centers.

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Louisiana Crawfish Promotion & Research Board

P. O. Box 3334
Baton Rouge, Louisiana 70821-3334

La. Dept. of Agriculture
504-922-1280

Testimony Before

THE RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

Written Statement By

Mr. Harold H. Benoit, Chairman
Louisiana Crawfish Promotion and Research Board
P.O. Box 44184, Capitol Station
Baton Rouge, Louisiana 70804

Mr. Chairman and Other Members of the Subcommittee:

It is indeed a pleasure to have the opportunity to submit written testimony in support of the Regional Aquaculture Centers. I am Harold H. Benoit, a crawfish producer from Morse, Louisiana. I also serve as Chairman of the Louisiana Crawfish Promotion and Research Board and on the Board of Directors (Treasurer) of the Louisiana Crawfish Farmers Association. I have held both of these positions for several years.

The Louisiana Crawfish Promotion and Research Board strongly supports the concept and structure of the Regional Aquaculture Centers. Title XIV of the Agriculture and Food Act of 1980 and the Food Security Act of 1985 authorized the establishment of regional aquaculture research, development and demonstration centers in the United States (Subtitle L, Section 1465[d]). The Centers encourage collaborative research and extension programs designed to compliment and strengthen existing programs provided by the Department of Agriculture and other public institutions. Members of the Louisiana Crawfish Promotion and Research Board have been impressed from the very beginning with the Center concept. These centers can fund research extension activities that are beyond the scope of the Louisiana Crawfish Promotion and Research Board.

The authorized level of funding for the Regional Aquaculture Centers is $7.5 million. Actual annual funding to date, however, is well below the authorized level, with only $3.75 million appropriated in FY91. We are requesting funding for the Regional Centers, which serve the entire United States, at the authorized $7.5 million level for FY93. Full funding is essential to the aquaculture industry in order to maintain an edge on foreign competition in the next century. Inadequate funding will reduce our abilities to cut production and processing cost and thereby not be able to compete within in the global market. Our crawfish industry has already felt the effects of imported crawfish tailmeat from China.

The Louisiana crawfish industry, as we know it today, began about 30 years ago. There are now over 115,146 acres in crawfish production in Louisiana consisting of more than 1,600 individual farmers that produced 60 million pounds of crawfish in 1992. This industry continues to employ approximately 15,000 people in our state, and the on-farm value of production was approximately $34 million in 1992. Crawfish aquaculture now occurs to some extent in 25 states. As with most new agricultural crops, much help is needed in the areas of production, harvesting quality assurance programs and marketing.

We would like to emphasize the fact that crawfish production costs, particularly harvesting costs, must be decreased to insure profitability to producers. Research and extension efforts to address these important areas are now underway through projects funded by the Southern Regional Aquaculture Center (SRAC). Results from these projects will be extremely beneficial to our industry. Preliminary results from these studies indicate that the number of traps/acre and trapping days can be reduced without having a negative effect on production. The studies also show that this management technique results in larger crawfish. It is readily apparent how valuable this study is to the producer because harvesting cost is reduced and a better crawfish is produced.

The U.S. imports 70% of the seafood it consumes. The crawfish industry is unique because we exported 4.0 million pounds of crawfish to Europe last year. This export market represents only a very small part of our balance of trade, but is indicative of the potential for expanded exports for U.S. aquaculture products. Louisiana crawfish are important components of the world market. We are however experiencing competition from Spain, China and Australia. Support from the centers through research is necessary to maintain our lead in the crawfish global market.

The two new projects on food safety are very encouraging. Microbial and residual contamination of aquaculture products have been publicized by the media. These studies will show how safe our products are and regain public confidence. The results of these studies are anxiously awaited.

A pertinent SRAC study is an ongoing study on effluent management from aquaculture facilities. Good scientific data will assist state and federal regulators in their attempt to monitor effluents from crawfish and catfish ponds and raceways and also insure quality wetlands and aquatic environments.

Results from these projects have already enhanced the position of aquaculture as an alternative agricultural crop, not only for the Southern Region but also for other regions of the country. Each project that is funded has input and review from research, extension and industry personnel so that practical, well-integrated programs, relevant to industry needs, are selected.

Again, we encourage funding at the authorized $7.5 million level for the five existing Regional Centers. We are excited about the Regional Centers because we know they are working toward addressing our industry problems.

Thank you for providing us the opportunity to submit this testimony on behalf of the Regional Aquaculture Centers.

Sincerely,

Harold Benoit

Harold Benoit, Chairman
Louisiana Crawfish Promotion and
Research Board

CENTER
FOR
TROPICAL
AND
SUBTROPICAL
AQUACULTURE

Testimony

to the

Subcommittee on Agriculture, Rural Development, Food and Drug Administration

and Related Agencies

1993

concerning

The Center for Tropical and Subtropical Aquaculture

Written Statement by

Dr. Kevan L. Main, Director

Center for Tropical and Subtropical Aquaculture

Honolulu, Hawaii

Mr. Chairman and Members of the Subcommittee,

Thank you for the opportunity to submit testimony on behalf of the Center for Tropical and Subtropical Aquaculture and the other four regional aquaculture centers. We appreciate the support the Subcommittee has extended during the past six years. The total funding appropriated for all centers during fiscal year 1992 was $4 million. Today I present testimony to strongly urge expansion of that support to the authorized funding level of $7.5 million for the five regional aquaculture centers.

The regional centers offer a unique mechanism for coordinating and employing the research, development, demonstration and training expertise of the entire nation. The centers work to expand the commercial aquaculture industry in direct response to that industry's needs as recognized in the National Aquaculture Development Plan. The unique aspect of the regional aquaculture centers is the direct involvement of industry in project planning and

implementation. Administered by the Department of Agriculture, the centers complement its existing research and extension programs.

In the broadest terms, aquaculture is underwater agriculture, not a new science or an obscure enterprise. Aquaculture, like land-based farming, requires substantial research and development support to expand its technical and economic base and reach its full potential.

The regional aquaculture centers are situated to take best advantage of regional aquaculture opportunities nationwide. The centers assist industry in developing regionally applicable production methods. The centers are programmatic rather than institutional, serving as a core of information exchange and regionally based research and education.

Because the American people are growing increasingly health-conscious, they consume larger amounts of seafood every year. However, because domestic landings of wild fish dropped in 1991, foreign imports of fisheries products, which had been growing for a number of years, reached $5.7 billion. That figure represents a $2.6 billion trade deficit for fisheries products alone and is the second largest component of the nation's trade deficit, surpassed only by oil imports. Increased aquaculture production could only benefit the domestic seafood market by providing safe, high quality products at lower prices and decreasing U.S. reliance on imports. The regional center program aids this growth by providing the research and development support necessary for improved culture techniques.

In operation since 1987, the Center for Tropical and Subtropical Aquaculture will initiate its sixth year work plan on April 1, 1993. The following projects will receive funding:

Aquaculture Effluent Discharge Program: The regulations governing discharge of effluent from commercial aquaculture ventures pose a major obstacle to the growth of the industry. Aquaculture effluent is governed by the same regulations applied to sewage and industrial waste disposal, even thought the water discharged from aquaculture facilities consists of organic materials found naturally in marine settings. In an effort to improve the situation, a six-year effort was initiated to gather data to document the impact of aquaculture effluent on coastal waters in Hawaii. Investigators assessed the potential environmental impact of aquaculture effluent and found that nutrient-rich aquaculture effluent can enhance the production of phytoplankton and/or benthic vegetation. Because fish are attracted to

areas of abundant food supply and grow and reproduce more rapidly under these conditions, total fish populations are often higher near effluent outfalls.

Approval of Drugs to Treat Disease in Shrimp Hatcheries: This project to seek federal approval for drugs to treat disease in domestic shrimp hatcheries, has already resulted in the Food and Drug Administration's 1991 announcement of "the availability of safety, effectiveness and environmental data to be used in support of a new animal drug application for the use of formalin to treat penaeid shrimp diseases." Two pharmaceutical companies are in the process of applying for approval to market the compound. The compound will greatly increase the ability of U.S. shrimp farmers to be productive and competitive in the marketplace.

Library Aquaculture Workstation: The Pacific Regional Aquaculture Information Service, known as PRAIS, was established with funding from the Center for Tropical and Subtropical Aquaculture in 1988. PRAIS provides the latest aquaculture information to researchers and commercial producers throughout the region. It recently established remote workstations at six sites throughout the state and will establish a seventh in Guam this year. Users at the remote sites can perform database searches at their convenience 24 hours per day.

Aquaculture Extension and Training Support: Through this project, five American-affiliated Pacific island nations receive aquaculture seed-stock, on-site aquaculture training and extension services from an aquaculture field agent. This service is helping to ensure that these nations can expand and strengthen their narrowly based economies.

A Market Study of Pacific Giant Clam Products: In response to the increasing number of giant clam culture facilities in the Pacific, this project is evaluating the market for the animal's various products -- including its shell, meat, and use as an aquarium specimen -- in the United States, Japan, Taiwan, Hong Kong and Australia.

Demonstration Projects for the Pacific Islands: This project provided support for the establishment of a giant clam hatchery in American Samoa and a sponge farm in the Federated States of Micronesia. Both projects have been extremely successful and are starting to train interested local residents in the technology necessary to start their own farms.

Introduction of New Aquaculture Species for Biological Culture Assessment: Investigators have completed the state of Hawaii's lengthy, complex process to obtain permits for the import of new aquaculture species. The steps necessary to obtain the permits is being documented in extension publications that will be distributed to commercial producers. Two new species of warm-water abalone imported under the project are showing extremely promising growth rates.

Expert System Disease Module: This project is in the final stages of development of a new computer program that will help farmers to identify diseases in tilapia cultured in Hawaii.

Investigation of Mullet Net-Pen Stocking Densities in Coastal Fishponds for a Stock Enhancement Nursery Program: This project is uniting modern technology with ancient Hawaiian fishponds to produce a new use for them as part of an effort to enhance wild fisheries throughout the state.

The scope and variety of these projects demonstrate the breadth of the center's contribution to developing the aquaculture industry. We believe an even greater contribution would result if the regional aquaculture centers receive funding at the fully authorized level of $7.5 million. We request your assistance and support to bring the nation's aquaculture industry to fruition.

Thank you again for the opportunity to submit testimony.

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Testimony
before the
Subcommittee on Agriculture, Rural Development, Food and Drug Administration
and Related Agencies
1993
concerning
The Center for Tropical and Subtropical Aquaculture
Written Statement by
Dr. Linden Burzell
Vice President and General Manager
Amorient Aquafarm Incorporated
Kahuku, Hawaii

Mr. Chairman and Members of the Subcommittee,

Thank you for allowing me to submit testimony on behalf of the Center for Tropical and Subtropical Aquaculture, or CTSA. I am Linden Burzell, Vice President and General Manager of Amorient Aquafarm in Kahuku, Hawaii. I have also had the privilege of serving as chairman of the center's Industry Advisory Council for the past six years.

As a businessman and scientist, I appreciate the Center's distinct role as a link uniting industry and research to work toward the common goal of developing an economically sound tropical and subtropical aquaculture industry. The Center's recognition of the need to integrate industry priorities and scientific research ensures that its program directly serves commercial producers.

In 1991, U.S. edible seafood exports rose to 2 billion pounds, a 6 percent increase. Despite that, the United States is still a net importer of seafood: imports rose 8 percent in 1991, creating a trade deficit of $2.6 billion. Thus the aquaculture industry -- already the fastest-growing segment of agriculture -- holds enormous potential for expansion that is, as yet, largely unrealized.

As aquaculture grows, it will not only provide a reliable, safe source of high quality protein for the American diet, but it will also create new jobs and generate tax revenues, thereby strengthening the economy. However, like any industry in its infancy, aquaculture requires support and nurture to reach its full potential.

During my six years as chairman of the Center's Industry Advisory Council, I have seen the Center provide that vital support. Commercial producers are asked to define industry problems, and then the region's scientific expertise is tapped to conduct research that will solve those problems. The solutions have taken a number of different routes, including education, training, technology transfer, addressing disease issues and government regulations, marketing and economics, and revitalizing or initiating aquaculture activity throughout the Pacific. Most importantly, each route was delineated in direct response to an industry need and tailored to an industry priority.

Although the Center's research projects have only been underway for one to five years, they have already extended enormous benefits to commercial producers in the region and throughout the nation.

For example, a Center-funded project to identify and test drugs for treating diseases in shrimp hatcheries offered the whole domestic shrimp culture industry tremendous benefits. In 1991, the Food and Drug Administration approved the specific use of Formalin in shrimp nursery and grow-out systems. The quantity of imported shrimp rose 15 percent over the first six months of 1992. The approval of Formalin will help to even the playing field for the domestic shrimp industry and foreign shrimp growers, who do not face such stiff regulation regarding drug use.

A project to study aquaculture effluent discharge -- regulation of which poses a major obstacle to industry development -- has established a base of knowledge regarding effluent characteristics and potential environmental impacts in Hawaii. The Center is now initiating a joint effort with the other regional aquaculture centers to document effluent characteristics in

other parts of the country and to improve the permitting process for aquaculture effluent discharge.

A project titled "Pacific Regional Aquaculture Information Service" ensures that even individuals in remote locations have easy access to the latest research materials on all phases of aquaculture. The value of this service to commercial producers, extension agents and scientists is shown by a 50 percent increase in the number of users in the last six-month period of the project.

Such progress in so short a time clearly illustrates that the singular, industry-focused approach taken by the regional aquaculture centers offers rapid, effective results. The investment in the regional aquaculture centers has yielded high returns thus far and will continue to do so. Expanding the Center's current program and capabilities would provide even greater yields. I therefore request that you approve the authorized full funding of $7.5 million for the regional aquaculture centers program.

Thank you again for the opportunity to testify before you.

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Testimony
before the
Subcommittee on Agriculture, Rural Development, Food and Drug Administration
and Related Agencies
1993
concerning the
Center for Tropical and Subtropical Aquaculture

Written Statement by
Dr. Richard Spencer
Limited Partner, Hawaiian Marine Enterprises

Mr. Chairman and Members of the Subcommittee,

My name is Dr. Richard Spencer. I am a limited partner in Hawaiian Marine Enterprises, located on the North Shore of Oahu, and Vice Chairman of the Industry Advisory Council for the Center for Tropical and Subtropical Aquaculture.

As a businessman, I support the regional aquaculture centers for their ability to make a substantial contribution to the nation's economy. From 1980 to 1991, the United States' trade deficit for seafood products soared from $1.8 billion to $2.6 billion. Fisheries products -- the second largest segment of the U.S. trade deficit -- represent the only area of U.S. food and agricultural trade in which a significant trade deficit exists.

The regional aquaculture center program provides an opportunity to reverse this trend. Allocating resources to developing and improving domestic aquaculture would provide higher quality, lower cost seafood products. Under-investment, combined with a growing world population and declining stocks of capture species, could lead to higher prices and increased dependence on imported fishery products.

As a Hawaii resident and business community member, I have a vested interest in CTSA's successes. In an attempt to broaden Hawaii's economic base and lessen its dependence on tourism and the military, the state is pursuing new industries. Aquaculture, for which Hawaii has abundant natural, scientific and technical resources, has been targeted by the state as an ideal enterprise. In addition, Pacific Basin territorial governments have rated aquaculture as a high priority for several reasons. Aquaculture has the potential to aid economic development by providing a continuing enterprise, to increase employment opportunities, to improve nutrition among Pacific Islanders and to offer the potential for a significant export product.

Hawaii and the Pacific Basin have extensive resources: the environment, abundant pristine seawater and climates that permit year-round culture of valuable aquatic species. In addition, extensive research and practical expertise in aquaculture are available through universities, private institutions and commercial producers.

Although aquaculture holds great promise and governments in the region are pinning much hope to it, the industry can only succeed with significant support. The Center for Tropical and Subtropical Aquaculture extends that vital support. By sponsoring projects that focus directly on industry problems, The Center for Tropical and Subtropical Aquaculture unites the region's considerable resources to make the dream of a viable aquaculture industry become a reality.

I sincerely hope that the activities and achievements of the Center will continue and expand in the coming years. I urge members of the committee to fund the regional centers at the fully authorized appropriation level of $7.5 million.

Testimony Before

THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, and RELATED AGENCIES
1993

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

Dr. Victor J. Mancebo, Director
Northeastern Regional Aquaculture Center
University of Massachusetts Dartmouth
No. Dartmouth, Massachusetts 02747

Mr. Chairman and members of the Subcommittee: Thank you for the opportunity to speak on behalf of the Regional Aquaculture Centers. I am the director of the Northeastern Regional Aquaculture Center (NRAC) which serves the industry in the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia and the District of Columbia.

The mandate of the U.S. Congress when it established the five Regional Aquaculture Centers under the leadership of the U.S. Department of Agriculture in 1985 was for the centers to administer funds for aquaculture research, development, demonstration and extension education with the goal of enhancing viable and profitable commercial aquaculture in the United States to the benefit of producers, consumers, and the American economy. The motivation in establishing the regional centers was to help a new and emerging agricultural growth industry become more competitive and help eliminate the gap between U.S. consumer demand and supply for quality seafood. The per capita consumption of seafood in the U.S. is increasing while it is well known that natural fishery catches have reached levels of maximum sustainable yield. To satisfy the consumers palate for seafood in the U.S. has required an escalating importation of seafood products which has now resulted in a U.S. trade deficit of over $6 billion for all fisheries products. Of all natural products, fisheries products are second only to oil in contributing to the U.S. trade deficit. By contributing to a well-run network of Regional Aquaculture Centers the U.S. Government is contributing to the economic health of its country by encouraging the domestic production of quality seafood and thereby directly lowering our trade deficit and providing new jobs in the private sector. New jobs will always be created by a successful and expanding growth industry such as aquaculture.

The pathway for the centers to achieve these goals was by taking advantage of the best aquaculture science, education skills and facilities and combine them in a cooperative effort with the private and commercial sectors of a highly promising and newly developing aquaculture industry. To this end the programs have been highly successful. At NRAC we are currently funding 13 projects. These projects represent a combined effort involving 34 major Universities and Institutions working along with a private sector component of 24 corporations and private growers. The ability of the Regional

Aquaculture Centers to bring the aquaculture industry and research communities to the table and, further, into collaborative working arrangements is one of the outstanding successes of the program.

Now in its fifth year, NRAC funded projects have already had a significant impact on the aquaculture industry. Using the multi-state, multi-institution approach to solving problems which are identified and prioritized by industry, NRAC funded projects are working towards developing genetically superior crops which are more vigorous and disease resistant, improving nutrition in low-cost feeds, increasing growth rates and survivability of cultured animals, better understanding of and control of aquaculture effluents, understanding marketing and economic issues, helping clarify regional state and federal regulations which directly impact aquaculture growers in the region, developing means of detecting pathogens present in fish without damaging the specimen, gaining information on oysters so as to help understand unexplained mortalities and developing a captive, domesticated strain of striped bass to eliminate the need for bringing spawners from the wild.

During the past year researchers have completed 5 major projects which were NRAC funded. Final reports are now being written and will soon be disseminated throughout the northeast research and industry communities. Completed projects included an analysis of the economics and marketing of farmed finfish, attempts at genetic manipulation of oysters through manipulation of chromosome numbers, genetic manipulation and sex control in striped bass, an extension networking program to help industry viability, and a major project on the genetic improvement of oysters for resistance to MSX disease.

The MSX disease resistant oyster project, one of the earliest funded projects of NRAC,was to develop and make available to the oyster cultivation industry strains of the American oyster which were resistant to or showed improved growth and survival when affected by, the parasitic oyster disease known as MSX. The MSX disease has had a profound effect on the oyster growing industry in the northeastern United States. From a high of 90 million pounds in the 1930's the production of oysters in the U.S. has declined by roughly 60% with most of the losses suffered in the Northeast region. The MSX project involves five universities and a number of private companies working in a collaborative research effort. Initial results indicated that MSX-resistant oyster strains developed by Rutgers University, the lead institution, grew and survived significantly better than local strains in areas affected by MSX. Secondary infections by an unrelated oyster disease (Dremo) have subsequently decreased the effectiveness of the MSX-resistant strains. However, the preliminary results were so encouraging, and industry interests remain so strong, that an NRAC funded follow-up project in cooperation with oyster growers to undertake commercial field trials of the resistant strains is presently ongoing. The MSX project, like all projects funded by NRAC, is driven by a strong industry presence in the development, undertaking and information transferral process. This is the unique industry-focused approach of the aquaculture centers.

Mr.Chairman, I sincerely hope that this testimony provided you with information concerning the relevance and need for the Regional Aquaculture Centers. We have appreciated your support over the past 5 years and are now respectfully requesting that the annual funding for this important and relevant program be brought up to the authorized level of $7.5 million so that

the program can continue with its ongoing work as well as increase its scope to further hasten the development of this food production industry.

Mr. Chairman and members of the Subcommittee, thank you for your continuing support of the Regional Aquaculture Centers Program and for the opportunity to submit our testimony.

Testimony Before

THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, and RELATED AGENCIES
1993

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

Richard Colantuno, CEO
Limestone Springs Fishing Preserve
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I am pleased for the opportunity to provide testimony concerning an industry perspective of the importance and influence of the Regional Aquaculture Centers. I have served three years on the Technical and Industrial Advisory Council (TIAC) of the Northeastern Regional Aquaculture Center (NRAC) and have had an opportunity to contribute with and directly observe the positive impact the Center has on the industry. NRAC and other Centers have given the industry valuable support by providing viable solutions when researching problems that could have a negative impact on the development of this industry.

As the aquaculture industry grows and develops, many obstacles obstruct this development, which the industry needs to overcome in order to be a viable economic contribution to our society. The Centers provide, with industry input, the necessary research that is needed to overcome these problems. Industry faces problems such as: bird depredation, waste discharge (NPDES), disease controls, and costs for regulatory compliance. These are some examples of what the Centers are now researching to help the industry to become a profitable business sector.

Aquaculture, if it is to grow and develop, must have support from government. These Centers are very important in achieving that goal. A joint effort, with academic, industry, and extension personnel, provides a pragmatic unit that is capable of producing positive results.

NRAC has most recently been involved in researching alternatives which will lessen the economic impact of aquaculture regulations. This has been identified as a real problem facing the industry because it is an industry in its growing stage. All industry needs regulation but economic feasibility is also an important factor. Through the research efforts of NRAC, this problem will be given viable solutions.

In order to guarantee continued progress, the Regional Aquaculture Centers need the appropriate support. I would like to urgently request the increase of appropriation to the authorized level of $7.5 million/year.

Thank you for your continued support of our industry.

Testimony Before

THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, and RELATED AGENCIES
1993

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

Scott Lindell, Director
AquaFuture, Inc.
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I am pleased to provide testimony regarding the Regional Aquaculture Centers (RACs) and their importance to aquaculture science in the interest of business development. I am a founder and Director of AquaFuture Inc, and indoor water recirculating operation growing hybrid striped bass for U.S., Canadian and European markets. This is my second year of service as a Industry Advisor on the Technical and Industrial Advisory Council of the Northeastern Regional Aquaculture Center.

The aquaculture industry faces unprecedented challenges and opportunities. some of the challenges arise from regulatory circles unfamiliar with the practices and impacts of the industry. Some of the challenges come from public confusion about the safety of seafood and their unawareness?? of the advantages of aquacultured products. There are numerous opportunities for aquaculture development in the fields of biotechnology, engineering, processing and product handling. Addressing these challenges and opportunities which are common to most segments of the aquaculture industry requires a broad and integrated regional and intraregional approach for which the RACs are ideally suited.

NRAC's responsiveness to the needs of industry stems from Industry Summits (roundtable discussions of industry representatives from all the Northeastern states) where research needs are prioritized. Projects can be selected for short-term quick results (6 months to a year) or longer-term research (up to 3 years) depending on the scope of the project and needs of the industry. The NRAC process of project formulation works to involve and produce results for broad segments of the aquaculture industry.

As an example, I am a cooperator in a two-year project to initiate the development of domesticated broodstock for striped bass culture. Currently, U.S. striped bass and hybrid striped bass farms produce about 5 million pounds of product annually from *wild caught* and spawned broodstock. This puts the industry at risk if there is an unsuccessful wild catch of broodstock. Historically every sector of agriculture *except* the nascent aquaculture sector, has made tremendous gains in production and profitability by domestication and genetic selection of superior strains. The "Domestication of Striped Bass" project could improve the production capabilities of 80 to 100 growers by

significantly lowering production costs, and by securing a source of fry and fingerlings. A complementary project is proceeding in parallel in the North Central Aquaculture Center to domesticate white bass (for hybridization with striped bass).

Projects like the one mentioned above attract broad participation and substantial in-kind support because of the great importance to the industry. There are many deserving projects like this one that await further and fuller funding. I would like to urgently request that you support the increase of appropriations to the authorized level of $7.5 million per year.

Testimony Before

THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, and RELATED AGENCIES
1993

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

Richard D. Clime, Vice-President
Dodge Cove Marine Farm, Inc.
P.O. Box 211
Newcastle, Maine 04553

My perception of the Regional Aquaculture Centers Program emerges from a one year involvement on the Technical Industry Advisory Committee (TIAC) of the Northeastern Regional Aquaculture Center (NRAC). As an unpaid industry-based advisor to NRAC, I have had the opportunity to review most program proposals and judge the results of these programs as they positively affect aquaculture development in the northeast. As a proprietor of a small aquaculture company in Maine, I try to be vigilant that every dollar spent through NRAC is a wise investment in economic growth in this aquatic sector.

Underpinning the effectiveness of the RAC Program is a decision-making partnership between aquaculture businesses, institutional researchers, and extension agents. The NRAC Board of Directors and Advisory Committee contain a responsible mix of representatives from these three professions. We are expected to collectively contribute to a common mission: Identify the regional impediments to aquaculture, seek creative scientific solutions to remove those impediments, fund the projects which most responsibly develop those solutions, and distribute the results to private business through a functional extension effort.

NRAC has been largely successful with its efforts. Former and present research in production methods, management practices, new species development, health and disease control, water quality improvement, economics and marketing, and regulatory assessment have contributed to advancements in aquaculture in our twelve state region. One example of NRAC's impact on my business is an on-going search for the cause of an unexplained oyster seed mortality occurring in summer throughout the northeast. My productivity and earnings have been affected negatively by this problem, and NRAC's multi-year research project promises to isolate the cause and recommend management practices which would ameliorate the effects.

Given the value of the RAC Program to aquaculture nation-wide, I urge this Subcommittee to recommend appropriation at an authorized level of $7.5 million. Such an investment will multiply economic benefits to the country many times.

Testimony Submitted To

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

DR. TED R. BATTERSON, DIRECTOR
NORTH CENTRAL REGIONAL AQUACULTURE CENTER
EAST LANSING, MICHIGAN

April 1, 1993

Thank you Mr. Chairman and Members of the Subcommittee for allowing me this opportunity to submit testimony on behalf of the Regional Aquaculture Center Program. I am director of the center that serves the industry and consumers in the 12 states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. This fertile section of the country produces abundant grains and soybeans that can be processed for fish feeds. We also have spectacular water resources for aquaculture within our boundaries. These include U.S. portions of four of the five Great Lakes, and rivers and streams that make up the Missouri, Ohio, and Upper Mississippi River drainages. The 59.7 million people residing in this region are mainly concentrated on these water bodies. They have a long tradition of using fish as a major source of protein in their diets.

In 1991, an estimated 890 million pounds of commercially caught fish and shellfish were consumed by residents of the North Central Region. On the supply side, less than 5% of regional consumption can be accounted for by commercial capture fisheries and aquaculture ventures from our lakes and rivers. Consequently, fish consumption in the North Central Region was a major factor in the $3.27 billion U.S. trade deficit in fish products reported by USDA for 1991.

Fish consumption has become expensive for people in the North Central Region. Demand has risen in response to increasing awareness of health benefits derived from fish in the diet. Fish from traditional U.S. ocean fisheries are being consumed by increasing populations in coastal states. The supply of

reasonably priced, good quality ocean products to our inland markets has diminished substantially over the last decade. Prices for fish in our grocery stores and on menus in our restaurants have spiralled upward. Meanwhile, much of the recreationally caught fish are environmentally contaminated and could potentially be a health risk.

If I may suggest, Mr. Chairman and Members of the Subcommittee, the time is clearly at hand to move aggressively to increase regional aquaculture production using our many water resources that are not contaminated. We also need processing technology and market development programs to make use of new and non-traditional aquaculture species and products.

The aquaculture community of the North Central Region is very appreciative of the steps Congress has taken to improve our fish supplies and reduce the trade deficit in fish products. USDA's Regional Aquaculture Center Program is one such initiative. The North Central Regional Aquaculture Center (NCRAC) works with four other centers on an integrated approach to a well developed and sustainable aquaculture industry in the U.S.A. and its territories. Programs of the centers are driven by needs of regional industries, articulated through strong Industry Advisory Councils. Top-notch teams of research and extension specialists from universities and public agencies in the North Central states began executing work plans to solve problems of the industry in May 1989. Work is accomplished using in-place people and facilities. No expenditures are made on brick-and-mortar or institutional overhead. At this time, NCRAC has ten projects on-line. They involve each of the 12 regional states, 38 aquaculture scientists and extension people, and 16 universities and public agencies. Analysis of economics and marketing, statutory policy in our states, and genetic improvement of regional strains of cultured trout, walleye, yellow perch, and sunfish are thrusts of the program. Improvement of technology for regional culture of hybrid striped bass is also underway. New projects on crayfish, bait fish, and aquaculture waste have recently gotten underway. Aquaculture specialists in USDA's Cooperative Extension Service are making information from these projects available in the region and across the country.

While a good start has been made to serve needs of the industry and consumers, additional regional problems of high concern are left unattended. Least-cost nutrition for newly cultured species, policy for

genetic engineering of cultured fish, and fish health and food safety are among them. On hold, is a large pool of expertise in our publicly funded universities and agencies that can deal with these concerns.

Mr. Chairman, and Members of the Subcommittee, thank you for your support of the Regional Aquaculture Center Program. Funding over the past years has been put to good use in this program. We respectfully request that funding at the authorized level of $7.5 million be provided so that this important program can conduct the full range of activities necessary for development of the industry and continued reduction of our large trade deficit.

Testimony Submitted To

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

MR. PETER REIFF, OWNER/OPERATOR
LOGAN HOLLOW FISH FARM
MURPHYSBORO, ILLINOIS

April 1, 1993

I appreciate the opportunity to express the importance of aquaculture in the state of Illinois. My partners and I are entering our twelfth year as aquaculturists. We have 65 acres of production ponds and a holding/loading facility in southern Illinois. Our farm is one of the largest and most productive in our state. We raise a variety of fingerling fish which are sold all over the state for pond and lake stocking. We have also supplied baitfish to the Illinois Department of Conservation for sportfish production. I am also President of the Illinois Aquaculture Industry Association.

Aquaculture in Illinois is in it's infancy, but growing. There are about 100 "aquaculture facility permit" holders, which is the result of about a 20% increase each year for the last five years. However, only about 20 aquaculturists derive a major part of their income from an aquaculture business. There are several part-time and small-scale fish farmers.

The 11 million people in Illinois use over 150 million pounds of fish and seafood each year. About 90% of that is from wild populations. Those populations, in many cases, are being overharvested. Fortunately, aquaculture offers an alternative to wild fish, now, and more importantly, in the future. At this point in time, aquaculture provides about 10% of the supply. Therefore, about 15 million pounds of aquaculture products, either in the form of fish for food, small fish used to stock lakes and ponds for recreational fishing, and/or baitfish are being used in Illinois. Unfortunately, less than 1 million of the 15

million pounds are produced by Illinois fish farmers. The other 14 million pounds are either coming from out-of-state or out-of-country.

The Illinois Aquaculture Industry Association (IAIA) feels there are certain impediments to the growth of the aquaculture industry in the state. This includes:

- lack of research on a variety of species suited to the region;
- little economic and marketing information; and
- inadequate extension of existing aquaculture information.

The North Central Regional Aquaculture Center (NCRAC) has promoted the aquaculture industry in my region and is presently trying to address the impediments listed above. I am grateful for that; however, when the current budget is spread over the needs of twelve states, less gets done. I feel the time is right for an increase in funding from the $4 million in the past to the $7.5 million, as authorized by Congress, for all five Regional Aquaculture Centers. President Clinton and Agriculture Secretary Espy both are from states where aquaculture is a major industry. Hopefully, this administration will highlight aquaculture throughout the country. This will have to take place before we can fill the void left by declining wild fish supply along with an increase in per capita consumption. The time is <u>now</u> to plan ahead.

Testimony Submitted To

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

DR. DAVID A. SMITH, PRESIDENT
FRESHWATER FARMS OF OHIO, INC.
URBANA, OHIO

April 1, 1993

We are witnessing another time in the aquaculture industry when we still have a window of opportunity to establish a major new economic force in the U.S. Aquaculture development overseas has continued at a rapid pace. In our country, development of salmon farms was left behind ten years ago, and consequent advances in Canada, Norway, Chile and Scotland made farm harvests possible that overshadow the wild capture of salmon from the oceans. A similar history has happened with shrimp farming that is now dominated by Taiwan, Thailand, Japan and South America. I fear that the aquaculture of coolwater fishes in the northern United States may be another repeat of this history of lost opportunity. We must choose between a continuation of the ongoing slow pace of public-funded support for aquaculture research and further loss of international competitiveness versus the opportunity to reap great economic gains in the most promising commodity in agriculture today. No other agricultural is in such increasing demand; no other agricultural product is so heavily imported from foreign sources; no other agricultural product holds the promise of safeguarding wild animal populations by the increase of its farm-raised production.

The North Central Regional Aquaculture Center has been responsive to the needs of the young aquaculture industry of the Midwest. New domesticated fish species are desperately needed by the private sector to boost development of major fish farms in the Midwest, but the low level of funding allocated the Aquaculture Center is providing a slow response to this major bottleneck. The development of these new breeds of fish suitable for a temperate climate is presently concentrating on species such as walleye, yellow

perch and hybrid bluegills. From our perspective in Ohio, the once robust perch fishery from Lake Erie is no more, and the marketplace in Ohio must depend on limited supplies of imported perch from Canada and Poland. Retail prices for this popular midwest fish have remained around $7-10 per pound for several years. Research priorities include appropriate fingerling technology, commercial production methods, and nutritional studies to develop cost effective feeds that utilize the vast agricultural feedstuffs of our region.

The updated adage about "give a man a fish and you feed him for a day, but teach a man to fish farm and you feed him (and ten others) for a lifetime" is particularly appropriate in these times of economic troubles and increased demand for federal monies. The main reason I spend volunteer hours in support of this research sponsored through the USDA's Regional Aquaculture Centers is that I strongly believe there is no better example of what our government can support in order to strengthen the economy, reduce trade deficits and provide a growing new agricultural industry with the potential to create new jobs, and produce a healthy and wholesome food supply for all Americans to enjoy.

Please give serious consideration to supporting a higher level of funding for adequate aquaculture research through the Regional Aquaculture Centers. I would like to request on behalf of the aquaculture industry that funding be extended to the fully authorized level of $7.5 million.

Testimony Submitted To

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

MR. STEVE BOUGH, OWNER
CRYSTAL SPRINGS
BRINGHURST, INDIANA

April 1, 1993

Members of the U.S. House Subcommittee on Appropriations for Agriculture, Rural Development, Food and Drug Administration, and Related Agencies:

I present my testimony to you today on behalf of the members of the Indiana Aquaculture Association which I represent as president, and also as the owner of Crystal Springs, Incorporated: a company that began as primarily an intensive aquaculture facility raising hybrid striped bass but currently produces, processes, packages, and markets not only bass but numerous other fish and seafood.

My purpose in writing is to express my concern for the level of funding currently allocated to the Regional Aquaculture Centers. Although Congress has authorized $7.5 million for the Centers, for the last two years they have been level-funded at $4 million. While this money is greatly appreciated by the aquaculture industry for the data generated by the research conducted within the five Centers, the fully-authorized amount could greatly enhance the research and development in areas that have been turned down by the Centers because of inadequate funding, but not from lack of need.

This past month I had the opportunity to represent Indiana on the Industry Advisory Council of the North Central Regional Aquaculture Center which met in Madison, Wisconsin to determine funding allocations to the various research and extension initiatives proposed. To be quite honest, before arriving I was skeptical at best that the industry representatives input and advice would carry weight in the final decisions.

I was pleasantly surprised to find out that in fact we did have, not only a voice, but also an impact on the proposals. This is critical in my opinion to the achievement of the goals of Congress in funding the Centers. Without collaboration between the industry and researchers the necessary research may not be initiated or completed, and the eventual data would not reach those of us who risk our capital to form businesses in this new industry.

Given the data generated from timely research the private sector will provide jobs and revenues at both the state and local levels that I believe will someday be unparalleled in agriculture. Rather than substantiate my belief with numerous statistics, let me just point out two critical facts:

- Aquaculture is the fastest growing segment in agriculture
- Fish and seafood imports are second only to oil in dollar volume for non-manufactured goods.

This industry advancement has global implications, and although the United States has enjoyed a tremendous advantage in traditional agriculture relative to the rest of the world this is not true in aquaculture. I believe it is a neck to neck race for technological advancement and considering that most other countries consume more fish per capita than do we, these countries have much at stake.

In closing I would stress that given the required information we can be the world leaders in our field. Please allocate the full $7.5 million for the Regional Aquaculture Centers and this much needed research.

Testimony Submitted To

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

MR. MYRON KLOUBEC, OWNER/OPERATOR
KLOUBEC FISH FARMS
AMANA, IOWA

April 1, 1993

Thank you Mr. Chairman and Members of the Subcommittee for this opportunity to submit testimony on behalf of the Regional Aquaculture Center Program. My name is Myron Kloubec, I own and operate Kloubec Fish Farms with my wife Ellen as our sole source of income. This year, 1993 will be our 12th year in the business. With every year, our business has grown. We have built our fish farm into the largest privately owned fish farm in Iowa, consisting of over 80 acres made into ponds in which we raise 9 species of fish. The bulk of our business is stocking lakes and ponds in Iowa, and selling our Iowa raised fish to other fish dealers in and out of state. Currently we have expanded again by constructing an indoor culture facility for the production of Tilapia. Tilapia are native to Africa, but are raised in the United States for human consumption.

Whether fishing for pleasure or fish production the environment effects us. We have a great concern for our environmental issues. I am also President of the Iowa Aquaculture Association. Our group reflects my concerns on these issues.

The Iowa Aquaculture Association appreciates the support for the Regional Aquaculture Center Program. We respectfully request that the funding at the authorized level of $7.5 million be provided so that this important program can conduct the full range of activities necessary for the continued development of the industry.

Testimony before

THE AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

Dr. Kenneth K. Chew, Director
Administrative Office
Western Regional Aquaculture Center
University of Washington
School of Fisheries, WH-10
Seattle, WA 98195

April 1, 1993

Mr. Chairman and Members of the Subcommittee, I am speaking on behalf of the Western Regional Aquaculture Center (WRAC), one of the five regional aquaculture centers designated through the U.S. Department of Agriculture to encourage cooperative and collaborative research and extension programs that would assist the aquaculture industry. These efforts have regional and national implications in light of the growing acceptance and increasing consumption of seafoods. As Director of the Administrative Office for WRAC, we have seen in the short six years of the program the growth of interest by all sectors of the aquaculture community. All twelve states in the western region provide input on what is needed to encourage the development of this critical area of aquatic husbandry under this USDA program. Equally important is the fact that many governmental, state and local agencies as well as industry people are working together to develop consensus of needs to encourage and promote aquaculture research and extension for the western region. This joint approach has been the key for successful projects that have been developed and cross over into several states, addressing regional problems that serve as in impediment and/or constraint to the production of aquatic products. The industry's input is critical, and coupled with a well structured Technical Committee of WRAC, makes this program innovative and has already resulted in a clear assistance to the development of aquaculture for our region

through the development of solutions and extension workshops to clarify problems to the growers of aquaculture products.

The consumption of fish and shellfish products in the United States is going to continue to rise in the next century and beyond. It is no secret that in order to meet these demands, more seafood products need to be imported from outside our country. Further, it is a known fact that because of these demands, it has created a substantial trade deficit in the United States. Most developing countries abroad are moving at a very fast pace and encouraging aquatic animal and plant husbandry in some cases with governmental financial support and incentives. The establishment of the five Regional Aquaculture Centers by Congress provided greatly needed support for research and extension in agriculture which before has been largely overlooked. It is no secret that the availability of wild stocks for harvest is level or declining, and aquaculture now must be encouraged to pick up the slack to increase seafood production for the growing populations of the United States and elsewhere.

The five home office directors for the Regional Aquaculture Centers are in regular communication with each other and meet at least twice a year to exchange ideas and regional needs. These directors constitute the National Coordinating Council and encourage a close working relationship on projects that might cross regional boundaries involving two or more regions.

Continued support of the five Regional Aquaculture Centers is critical to the development of aquaculture in the United States. Significant aquaculture activities and growth in the United States is expected to continue each year because of the demand for seafood products. Thus, much of the research and extension activities associated with the Regional Centers will have very broad and supportive implications to the nation and its economy.

Mr. Chairman and Members of the Subcommittee, I urge you to support funding for the five Regional Aquaculture Centers to the full authorized level of $7.5 million. Thank you for giving me the opportunity to provide this testimony.

67-181 O—93——21

Testimony before

THE AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

Brian Allee, Ph.D.
Harza Northwest, Inc.
2353 - 130th Avenue N.E.
Bellevue, WA 98005

April 1, 1993

Mr. Chairman and Members of the Subcommittee: My name is Brian Allee. I am the Senior Fisheries Scientist for Harza Northwest, Inc., an engineering and environmental consulting firm in Bellevue, Washington. I will be the President of the Fish Culture Section of the American Fisheries Society in September of 1993 and I am past President of the Pacific Coast Oyster Growers Association. I am now, and have been since its inception, a member of the Industry Advisory Council for the Western Regional Aquaculture Center.

I have been active professionally in the field of fisheries for over 22 years and have worked in the private sector in Aquaculture for the majority of that time in Alaska, Washington and Oregon. During much of my career I have worked with University, Government and Industry in a cooperative research mode to attempt to solve pressing Industry problems in order to achieve successful business commercialization. It is my opinion that the program of research sponsored by the Western Regional Aquaculture Center in my geographical area has made a significant contribution to the developing industry here.

Harvesting food from the ocean and our abundant inland bodies of water in the United States has been a continuing struggle given the major efforts by foreign nations in the world marketplace. We in industry need your support to strengthen the critical research necessary to make the United

States Aquaculture Industry competitive and to build our world market share. The Aquaculture Industry provides jobs and makes a significant economic impact in the region and local communities and is compatible wit the environment.

Clearly, given our national fiscal environment your careful scrutiny is required for all budgetary requests, however, funding for the Five Regional Aquaculture Centers at the fully authorized level of $7.5 million is an investment which will ultimately generate real economic value in terms of the "fish dollars" which circulate through the local economy. I can think of no better way for Government to help industry than through the financial support of research which focuses on industry generated problems in an effort to make us more competitive as a nation.

Thank you for the opportunity to provide this testimony and I urge your support of this critical appropriation.

Testimony before

THE AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

Mr. Kenneth E. Cline
Cline Trout Farms
5555 Valmont
Boulder, CO 80301

April 1, 1993

Mr. Chairman and Members of the Subcommittee: My name is Kenneth Cline. I am the owner of Cline Trout Farms of Boulder, Colorado, a family owned producer of trout for the recreation markets in the inter-mountain west. I am a past president of the United States Trout Farmers Association, and current vice-president of the National Aquaculture Association. I am a member of the Industry Advisory Council for the Western Regional Aquaculture Center.

I have been involved with our family aquaculture business for my entire life. Many of the technological advances in aquaculture during my lifetime have been developed by individual farmers to meet specific needs on their farms. We have now reached the level of technology that the poultry industry had in the 1950's. To maintain this emerging industry, more technical, broad-based research is needed.

Government agencies and universities have the capabilities to conduct that needed research. However, fish farmers must have input into the system that allocates resources to insure that those resources are used for optimum benefits. The Regional Aquaculture Centers have that mechanism for fish farmers to review and prioritize all projects.

I realize that economy is necessary in federal programs. Regional Aquaculture Center budgets are closely scrutinized and controlled by administrators, researchers, and industry representatives. The research funds have been leveraged very effectively to coordinate the resources of other various private businesses, academic institutions, and state and federal agencies.

Regional Aquaculture Center projects have been broad-based with application throughout the region and for multiple species. The fish farming industry also supports the nation-wide waste water management initiative of the Regional Aquaculture Centers. National, regional, multi-species projects that are prioritized, reviewed, and conducted through cooperative efforts of government, research institutions, and private industry, making the Regional Aquaculture Centers an excellent and effective program for aquaculture research and extension.

I urge you to support funding for the five Regional Aquaculture Centers at the full authorized level of $7.5 million. Thank you for the opportunity to submit this testimony.

Testimony before

THE AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

concerning

SUPPORT FOR THE REGIONAL AQUACULTURE CENTERS

written statement by

Dr. John R. M. Forster
Stolt Sea Farm
Port Angeles
WA 98362

1993

I am John Forster, Director Business Development, Stolt Sea Farm Inc. I also serve on the boards of Washington Fish Growers Association and the Washington Farmed Salmon Commission. I represent Washington at the International Salmon Farmers Association and serve on the Industry Advisory Committee of the Western Regional Aquaculture Council.

My Company is one of the world's largest producers of farmed salmon, and a pioneer in the farming of six other aquaculture species including Sturgeon, Walleye and Halibut.

The Aquaculture industry can make three important contributions to this country in the years ahead:

* It can provide home grown seafood - substituting for imported seafood and improving the nation's diet.

* Pressure on vulnerable wild fish stocks can be eased because fish for fish for consumption can be farmed rather than hunted.
* Hatchery production of new aquaculture species can be used to sustain and enhance these same vulnerable stocks.

In addition our industry creates jobs.

Since their inception the Regional Aquaculture Centers have been a most effective way in which government has supported R & D in this industry. Our experience in the Western Region has been special. Collaboration between academia, government agencies and industry have resulted in high quality, relevant research and comradeship which provides many other intangible benefits.

Support for the Regional Aquaculture Centers is a cost effective way to support an important new industry. I urge you to fund them at their full level of $7.5 million.

Thank you for the opportunity to present this testimony.

NATURAL RESOURCES RESEARCH INSTITUTE

WITNESSES

HON. JAMES L. OBERSTAR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA ROY ADAMS, ASSOCIATE DIRECTOR FOR BY-PRODUCTS AT THE UNIVERSITY OF MINNESOTA, NATURAL RESOURCES RESEARCH INSTITUTE

Mr. DURBIN. Our friend and colleague from the State of Minnesota, the Honorable James Oberstar. Welcome.

Mr. OBERSTAR. Thank you, Mr. Chairman. You are going to have to turn your translator's listening device up now because you got to hear another accent from the other end of the Mississippi River.

If I may, I served for many years on the Merchant Marine and Fisheries Committee where our former colleague Bob Leggett Chaired the subcommittee, and he did an extensive inquiry into the aquaculture.

An astonishing fact is one acre of ocean will produce 10 times the protein of one acre of land. And the Japanese, again, led the way in aquacultural. It is very refreshing to hear this testimony.

In my part of the end of the Mississippi River, we have taken an abandoned iron ore mine which is filled up with water and is now a fish farm producing salmon and coho salmon and other types of salmon. Very, very successfully. It is a 400 foot deep mine with cold water, and they survive all year long.

Now, that is a long way from the subject I came here to address. And with me is Dr. Roy Adams.

Mr. DURBIN. Welcome.

Mr. OBERSTAR. He is the Associate Director for By-products at the University of Minnesota, Natural Resources Research Institute.

The Natural Resources Research Institute is actually a converted military facility. It is an abandoned radar detection center that no longer had a military use. It was closed in 1972.

Finally, about eight years later, we were able to convert this into a research center, which already had all the necessary computer capability, including three-foot thick concrete walls so incoming Soviet radar couldn't intercept what they were doing. It has been a tremendously successful bridge between the pure research and market application.

This center serves as a means for small entrepreneurs in Minnesota, Wisconsin, and elsewhere to bring technologies that have been brought to the point of marketability, test them out, see whether they are fit for market use or to perfect the technology and market it through this center. This center brings researchers from the University of Minnesota, and market development people from the private sector together in one synergy.

We have been able to create over 500 jobs in small enterprises in northeastern Minnesota based on natural resources. And one of the principal areas of focus of the institute has been wood technology. As the drive intensifies to spare the long-lived species like black spruce that has a 120-year rotation or jack pine with 90- to 100-year rotations and balsam, wood technology has been instrumental in exploring the use of other species such as aspen, birch, or other lower quality woods.

This center has been a principal means of developing the alternative technologies and other lesser used or not used species. We will be asking the subcommittee for $850,000 to fully fund the program for wood products development.

Let me just touch on a few of the things they have developed. The use of wheat straw and other agricultural fibers for recycled building materials. The NRRI has got together with a small sawmill, developed a computerised ripsaw, programmed this saw to overcome complexity of the control system, helped it to be more efficient to make the difference for this entrepreneur operator between profitability and failure.

Through their marketing program, they found a Japanese customer for a northern Minnesota product and put the two together. And now we are selling to the Japanese instead of other way around. They have developed low quality wood into a desirable laminated veneer lumber product that makes dimensional lumber very attractive for furniture use and other applications stimulating, again, a small-sized industry that also is now making laminated propellers for wind-powered generators.

They have also developed manufactured shingle products that can be chemically treated and now is a success in marketing shingles. They are finding so many uses from industrial engineering, perfection of the process, cost accounting, composites that are wood based, bringing together dissimilar wood products that otherwise would be thrown away, wasted, bring them together and finding a new use for those composites for building purposes.

Then, also on the business side, they are helping the small entrepreneur who may be very good at cutting wood and laminating but didn't know how to market or put together a business plan.

. And NRRI has taken over that role and helped them to do a better business plan and business marketing of their product. There is one that I particularly like, panels of re-oriented strand board that are produced in a semi-continuous process which has greatly improved the productivity of this mill and has made it a very marketable, competitive product. This is an investment in the future. This is taking an available resource, adapting it, making it available in other forms to sustain small businesses, small enterprises. This is not, you know, the Big Bang theory.

We would like to plunk down a thousand and 1500 jobs in our district, but my years in economic development teach me that small is sustainable and takes more hard work in the long run. It is more a sustainable kind of economy to build in an area, and I would rather have a hundred businesses with 50 jobs in many different dimensions than one big business that is terribly vulnerable.

Dr. Adams can supplement my testimony and respond to any questions that you may have.

Mr. DURBIN. Dr. Adams.

Mr. ADAMS. I was just here to respond to questions.

Mr. DURBIN. Okay. Now, I understand that this started off as a project of the University of Minnesota.

Mr. ADAMS. Yes, we are a department of the University of Minnesota, but we are somewhat nontraditional in the work that we do in a university setting.

Mr. DURBIN. Have you received help from private sector/public sector outside of the university?

Mr. ADAMS. Yes, we receive funding, quite a lot of other State funding through some other programs that the State has developed over the last few years. We also receive a significant amount of industry funding. As you can appreciate, it has taken us a few years. We started from scratch, and we have to build up a level of trust with the industry, and we are in the process of doing that, and are starting to get more and more significant funding in the wood products area.

Mr. DURBIN. What has been the impact of the increase in the price of lumber on your efforts?

Mr. ADAMS. Well, we think it is giving us a tremendous opportunity in our part of the country because most of the material that is coming out of our part of the country is not solid wood, it is composites, so we can basically take almost any type of material and put it back together again, so we think it is giving us an opportunity. We have the only mill in the country right now that is taking wood flakes and producing a structural lumber product from this, and it is in the process of getting code approval so they can use this material in structural products.

We think that will have a tremendous impact on the marketplace. The company is looking at additional mills throughout the country. That should help the whole process.

Mr. OBERSTAR. We don't have the dimensional lumber growth capability of the big West Coast forests with their 300-inch-a-year annual rain falls. We barely get 27 inches of rain in northern Minnesota and a 90-day growing season, so Bob Jones, years ago when he was Chairman of Public Works came up to northern Minnesota, he looked around, he told my predecessor, John Blatnik, he says, "John, all you got up here is whittlin' wood," so we try to do our best with the whittlin' wood.

Mr. ADAMS. I might add, if I may, that as the Congressman mentioned one of the other things we are really interested in is looking at some of the residue coming out of the agricultural side and looking at the potential for making materials for them. For example, we are working with a small corn grower in the southern part of the State to make a composite panel to use as an insulation-type product, so there is a lot of opportunities in that area, too.

Mr. DURBIN. I might say to my colleague, Mr. Oberstar, several years ago I joined Mr. Sikorski in the boundary waters on a canoe trip and we got at least 27 inches of rain in three days.

Mr. Thornton.

Mr. THORNTON. Thank you very much. Just let me join in welcoming our colleague, Mr. Oberstar, and in appreciation of your leadership on so many issues in the Congress. This is an area that is of great importance because of the utilization of resources, which otherwise might be wasted, and the preservation of resources, such as you indicated, where there may be a greater concern toward preservation and maintenance of species.

Technically, what kind of resin or bonding material do you use in the fiberboard?

Mr. ADAMS. Currently we are using mostly phenolic-based adhesives, but we are also looking at urethane adhesives. Another one

of the areas we would like to see expanded is the potential for natural-based adhesives. There is a lot of work going on around the country. As we indicated in the long version of the testimony, there is a lot of potential to develop materials like this in other areas, and we would like to use research that is coming from other places rather than doing it all ourselves.

Mr. THORNTON. This is exactly the point that I was mentioning. There are areas and regions where there are excesses of the natural bonding materials, and perhaps some combination of resources might be useful.

Mr. OBERSTAR. The southern yellow pine is one of those.

Mr. THORNTON. That happens to be one, yes, sir; it is grown in my district, just like corn, Mr. Chairman.

Mr. OBERSTAR. Southern yellow pine has such a high resin production that it has been difficult to find a use, commercial use was not found until just recently through wood chemistry, but we find that the extraction of resin from southern yellow pine can be a bonding, a very important bonding agent for the particle boards, waferboards.

Mr. THORNTON. Mr. Chairman, I am completely convinced that this is a meritorious project. I want to thank you for yielding.

Mr. DURBIN. You better stop while you are ahead, Jim.

Mr. OBERSTAR. I just did.

Mr. DURBIN. I want to thank our colleague, Congressman Oberstar and Dr. Roy Adams for joining us today. Thank you very much.

[The prepared statement follows:]

STATEMENT OF THE HONORABLE JAMES L. OBERSTAR

OF MINNESOTA

BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

APRIL 1, 1993

MR. OBERSTAR: MR CHAIRMAN, Members of the Subcommittee, I am pleased to have the opportunity to appear before this subcommittee to request appropriations for a natural resources program of critical importance to my district and the State of Minnesota. I understand the budgetary constraints which face you during the current fiscal year.

Natural Resources Research Institute (NRRI)

NRRI at the University of Minnesota-Duluth should receive funding to expand its activities in the incubation of wood products technologies which will help ensure sustainable development of private sector opportunities in the wood products industry. The proposed program will build on concepts which have been used successfully by NRRI since their inception in 1985 and emphasize the opportunity provided by private/public partnerships.

The program will be directed towards existing small businesses, which play a critical role in the nations' economy and particularly the rural economy. In Minnesota's lumber and wood products industry about 17 percent of the companies have more than 20 employees. These small businesses often lack the resources to incorporate new ideas or technologies. Their size and profit margins limit their ability to innovate, yet the are an integral part of the economy and they need to change to survive.

This program will help provide those resources and the coordination of the technology transfer process. The program will work with companies to meet specific objectives. It will assess market opportunities and look for market opportunities which are not being currently explored. It will then work with companies to implement value-added manufacturing and innovation to provide products to fill those market voids. The goal is to improve the competitiveness of these companies in the global marketplace.

This program is aimed at wood products manufacturing industries, and will not be a traditional incubator which typically provides common office space and services, administrative support and modest space for other functions. Incubators are generally occupied by service industries rather than manufacturing.

An essential strategy will consider the total manufacturing system from raw material to the customer to achieve technology transfer. In some cases this will involve hands-on work in a manufacturing facility, in others it will involve provision of technical and business assistance for a company, and other times it will involve product and process development. In the future we anticipate involvement in worker training for new technologies and provision of space for the demonstration of new equipment.

An important concept in this program is that of sustainable development. There is no value in incubating a company if it will run out of raw material as it grows. Similarly there is no point in incubating the manufacture of a product which no one will purchase.

The NRRI has considerable expertise in the assessment of raw material supplies and transportation networks. This allows a determination of costs to get raw materials to mills and products to market. Many of the new technologies will help reduce wood fiber use by using more efficient processes and using recycled materials. It will allow the use of other fiber currently not used in significant quantities, such as smaller trees, fast growing hybrids, new species, both domestic and foreign, and agricultural fibers, e.g., wheat straw.

As product life cycles are getting shorter and shorter it becomes more important to conduct product research and development to provide new products for the marketplace. In this program applied research will be market driven so that the time frame to commercialization is short. Technologies and research done by others will be assessed to see if they can be implemented with little additional work. In some cases a combination of technologies will provide the desired result.

Many times a technological development is abandoned because the timing is wrong or it is not developed sufficiently to give it a fair test. We plan to look extensively at the work done by other centers and other researchers to determine if any can be implemented at this time. NRRI will continue its own research and development program taking care not to duplicate completed or ongoing work at other places.

An important component of the program will be the development of prototypes. This has been critical to NRRI's success over the past few years and some examples will be given later. Prototype products are much easier to assess than a drawing on a piece of paper or a concept in someone's mind.

The program will encourage the adoption of more efficient and quality conscious manufacturing methods, such as Just-In-Time manufacturing or Statistical Process Control to help the manufacturing sector. New technology and automation will be advocated to enhance the efficiency of wood processing systems. In many instances these improvements do not require large capital outlays. This will be particularly attractive to smaller firms. We plan to make our prototype processing facilities available as part of the manufacturing network.

NRRI was established at the University of Minnesota-Duluth by the Minnesota Legislature in 1983 and became active in 1985 with a mission to foster economic development of Minnesota's natural resources. The Minnesota initiative to encourage job retention and job creation in private sector natural resource based companies has been extremely productive, with much of the success occurring in the wood products area. Several examples will serve to illustrate this point.

The NRRI provided the catalyst for the start up of a wood dimension parts manufacturing operation in 1988. The company has grown to about 60 employees. NRRI has assisted this growth by providing significant industrial engineering. When the company installed a computerized rip saw NRRI provided assistance in programming the saw and helping to overcome the "complexity" of a computer control system. Other help has been provided in inventory control.

Similar industrial engineering help has been provided to another small company allowing them to get a better assessment of their production costs. This allowed the company to bid on jobs without bidding itself into bankruptcy. NRRI also provided contact with a Japanese customer which recently resulted in orders. For another small company NRRI developed and installed a computerized database management system which allowed the company to enter invoice data, print invoices, mailing labels and production reports.

In several instances NRRI has helped prepare prototype products. In the wood furniture area, this has allowed a company to assess market opportunities based on a product in hand. Using pilot plant facilities, NRRI has provided material which is not currently available from other sources. Laminated veneer lumber was used by a local furniture manufacturer. Similar material has been used by a small company to make propellers for wind-powered generators.

NRRI has played a central role in attempting to develop a preservative treated shingle market in Minnesota. This project has demonstrated that a network of companies is often required to implement new technologies. It is also a good example of the implementation of technologies developed elsewhere being applied successfully. A small producer manufactured shingles which were then chemically treated by two treatment companies. A marketing and installation company is also participating in the work. The product is a technical success and the companies are discussing how to organize a cooperative business venture.

The final example is a project which is helping to activate process technology to manufacture dimension parts from low quality wood and previously unusable slabs. This is done by removing defects before drying and gluing parts together after drying to give the size of material required. This is a more efficient and cost effective method. The technology has been used for some time in Europe and Japan but has not implemented in the U.S. The concept has considerable support from the industry and impacts on employment are expected to be significant. Three Minnesota companies are considering expansions using this technology.

The proposed program will draw upon scientists at NRRI with proficiency in many aspects of wood science and technology and forest management. Skills are available in resource and transportation analysis, industrial engineering, process optimization, cost accounting, wood based composites, furniture production, prototype manufacture, computer applications, business services, business plans, market analysis, and entrepreneurial development.

The NRRI forest products program has facilities available which allow the manufacture of material and products on an intermediate scale and provide conditions which simulate some manufacturing operations. This provides a link between the lab bench and industry. Much of the equipment is of a size which would be found in a manufacturing facility. In fact NRRI presently leases equipment to several start-up companies.

A pilot plant area has a composite material manufacturing line with the capability to make full-size (4-by-8 foot) panels of oriented strandboard and other composite materials in a semi-continuous operation. Much state-of-the-art equipment is available for the development and testing of products. A mechanical and physical properties test laboratory has the capability to test both large and small material specimens or products. A prototype manufacturing laboratory is currently under construction with monies allocated by the state. NRRI has standard large size woodworking equipment for this lab and anticipates the purchase of computer controlled processing equipment. This laboratory will allow considerable prototyping of products to be done, a key element in the program.

It is anticipated that this program will allow limited upgrading of these facilities. In developing NRRI's capabilities much second hand equipment has been used. Although initially cost effective this older equipment becomes less effective as time passes. There is a need to update some of these facilities and upgrade computer facilities to support this program.

A recent study estimated that the Institute has been responsible for fostering approximately 500 new jobs. The benefit cost analysis in this study estimated the gain to Minnesota over the lifetime of jobs created at $87 million. For each state tax dollar provided to NRRI, about $8.50 of economic activity is and will be generated. The proposed program will build on this initiative and implement these successful procedures over a broader region around the Lake States.

The President's economic program calls for long-term public investment in economic growth and jobs. The NRRI wood products program is a model for doing this, and I request that the subcommittee provide $850,000 to fully fund this program.

Mr. Chairman, this concludes my list of funding requests for FY94. I understand the severe fiscal restraints under which you must work this year, and I greatly appreciate your past support of the natural resources programs benefitting Minnesota and the nation. Your continued support will allow proper stewardship and preservation of the abundant natural resources of northeastern Minnesota.

MIDWEST FEEDS CONSORTIUM

WITNESS

STEVEN C. NOAH, CORPORATION FOR INTERNATIONAL TRADE

Mr. DURBIN. Steven Noah, Corporation for International Trade. Your testimony will be made a part of the record; if you would like to summarize, we would appreciate it very much.

Mr. NOAH. Thank you, Mr. Chairman. Mr. Chairman and members of the subcommittee, we are seeking support for a program to expand the markets for Midwestern feed grains and oil seeds. Specifically we want to increase the use of the Midwestern crops and the rations for fish and shrimp grown as aquacultural crops. Aquaculture is the fastest growing segment of American agriculture and the potential for using grains and oil seeds in the diets of fish is enormous.

Aquacultural growth is estimated to continue between 8 and 10 percent annually to the end of this decade. It is also estimated that worldwide aquaculture will require 6.6 million metric tons of feed per year by the year 2000. A problem facing aquaculture is the cost and availability of high quality fish feed, which is a primary protein ingredient in aquacultural feeds.

Economic alternatives for aquacultural diets must be sustained to aquaculture's expansion. Because U.S. agricultural production has outpaced demand, we must increase markets for grain, oil seed products, and animal by-products. Nutrition is the backbone of the feeds industry. Market expansion can only be achieved through documentation of the nutritional value of specific feed products relative to specific target animals. A systematic approach to assaying the nutritional value of our agricultural products is needed as a first step.

Mr. Chairman, we formed the Midwest Feeds Consortium to conduct the research and development required to address these opportunities. The Midwest Feeds Consortium includes the Corporation for International Trade of Des Moines, Iowa, the Midwest Agribusiness Trade Research and Information Center, the Center for Crops Utilization Research at Iowa State University, and the Oceanic Institute of Hawaii.

As you know, Mr. Chairman, Iowa State University is a world leader in plant utilization research and the Oceanic Institute in Hawaii is equally recognized with respect to aquatic feeds development.

Mr. Chairman, the Midwest Feeds Consortium respectfully asks your favorable consideration of an appropriation for $1,500,000 to begin this important research.

Mr. DURBIN. Can you tell me what it is that this consortium will do that isn't being done presently? We have had some testimony here from all of the different aquaculture research centers on research underway. What is it that you would add to this?

Mr. NOAH. Well, specifically, Mr. Chairman, we would add the combination of the plant nutritional research at Iowa State with the feed mill research at the Oceanic Institute. It is our understanding that specifically in saltwater fishes, like shrimp-and shrimp will soon be one of the major aquacultural products raised

commercially. Not only is nutritional value important, but also things like texture and taste and color are important or the shrimp will not eat the diet in a manner to promote economical growth. The Oceanic Institute of Hawaii is completing one of the world class state-of-the-art aquacultural feed research mills. They need the help from nutritionists at Iowa State University to properly determine how soybeans and corn also can be used to formulate diets for shrimp and saltwater finfish.

Mr. DURBIN. One of the things we are going to be striving to do this year in the subcommittee is make certain that any research projects which are funded come thoroughly documented in terms of the scientific merit and effort that is going to take place. It would be very helpful, for our consideration, if you would provide us with some background, supportive information, of scientific and research groups which support your effort, some indication as to what your goals are, whether your particular approach is unique, and finally what your timetable is to complete this effort. We find ourselves on the floor of the House defending many of these projects, and that information is absolutely invaluable.

Mr. NOAH. We will provide that information to you in a timely manner, Mr. Chairman.

Mr. DURBIN. Thank you for your testimony, Mr. Noah.

[The prepared statement follows:]

TESTIMONY OF MR. STEVE NOAH

THE CORPORATION FOR INTERNATIONAL TRADE

DES MOINES, IOWA

BEFORE THE SUBCOMMITTEE ON APPROPRIATIONS

ON AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

MARCH 31, 1993

Mr. Chairman, we requesting your consideration of support for a program to expand the markets for Iowa grains. Specifically, the potential is to incorporate plant material as a substitute for fish meal in the rations for fish grown as aquacultural crops.

The feeds industry in Iowa, which is typical for the United States in general, can be characterized as highly competitive and stable, with an emphasis on export of feed ingredients. Iowa's agricultural production has outpaced demand.

One challenge to its agriculture industry is to increase the demand for grain and oilseed products as well as animal by-products, ideally through export of complete rations or mixes.

Nutrition is the backbone of the feeds industry. Market expansion can only be achieved through documentation of the nutritional value of feed products relative to specific target animals.

A systematic approach to assaying the nutritional value of Iowa's agricultural products is needed as a first step. Further work between nutritionists and feed processors would then be called for to better match products with industry needs.

The worldwide aquaculture industry is an area of opportunity for Iowa's feed industry. Growth in this industry is estimated to continue between 8 and 10% annually to the end of this decade. It is estimated that worldwide aquaculture feed production will be 6.6 million metric tons by the year 2000.

A dilemma which will rapidly become a constraint on the growth of the aquaculture industry is the cost and availability of high-quality feed ingredients, especially marine protein ingredients.

Economical alternatives for conventional aquaculture diet ingredients must be developed to sustain the industry's expansion. An additional constraint is the disposal of fish and shrimp processing waste.

The Midwest Feeds Consortium was formed to conduct the research and development required to address these opportunities. Consortium members include the Corporation for International Trade, the Midwest Agribusiness Trade Research and Information Center, the Center for Crops Utilization Research at Iowa State University, and the Oceanic Institute, Hawaii.

The work proposed by the Consortium will effect a broad cross-section of Iowa's agriculture and support industries. Iowa's farmers will benefit from the opening of new markets for their products.

In particular, it is anticipated that soybean, wheat, corn, and animal by-product producers could derive a greater penetration of their products into the rapidly expanding international aquaculture feeds market.

Animal by-product producers will also benefit from the systematic evaluation of their products. Blood products, gelatin, feather meal, meat and bone meal, as well as other products currently under development, will receive international attention through marketing based on the growth and digestibility information generated.

Aquaculture is also the fastest growing segment of American agriculture and the potential for using Iowa grains in the diets of fish is enormous. Research has demonstrated clearly that plant proteins can be substituted for animal proteins in fish diets.

As well, the byproducts of seafood and aquaculture processing can be used to enhance feeds for terrestrial animals. The extent to which this can be done and the technological advances required must be understood.

As you well know, Mr. Chairman, Iowa State University is a world leader in plant utilization research, and the Oceanic Institute in Hawaii is equally recognized with respect to aquatic feeds development and will soon have in place a state-of-the-art aquaculture feed research mill.

Consequently, Mr. Chairman, the Midwest Feed Consortium respectfully asks your favorable consideration of an appropriation of $1,500,000 to begin this important work.

RURAL DEVELOPMENT PROGRAMS

WITNESS

HON. JOLENE UNSOELD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. DURBIN. From the State of Washington, our friend and colleague, the Honorable Jolene Unsoeld. Thank you for joining us.

Mrs. UNSOELD. Thank you, Mr. Chairman. I just had the pleasure of touring western Washington with Secretary of Agriculture Espy, and we got to show him a lot of what was going on there.

Mr. DURBIN. Did he say nice words about this subcommittee?

Mrs. UNSOELD. Yes, he did, yes. We both did. But he got to see that we have rather large areas where over 80 percent of the schoolchildren are receiving supplemental food, food banks serving 16.5 percent of the population, and I have got one county where the unemployment rate is 32.6 percent. That is the official count. By the time you count the people that have fallen off, it is probably a lot higher.

I know that unemployment is something that we are looking at clear across the country, but there are different ways of addressing it in different parts. I want to talk to you about two things that have been so good that your committee has helped to fund, and one is the Farmers Home Administration Business and Industrial Loan Guarantee Program.

Tom Mayr of southwest Washington has a second generation mill that is retooled to use the very small logs that are currently all that is available. It was through that program that he was able to do the financing. That is a family-owned business paying family wages, and I appreciate that help and hope that kind of program will continue.

Another one is the Resource Conservation and Development Program, which has a lot of exciting projects and potential. I wanted to show you one of the things that we are hoping will eventually get funded out of that particular program, and I am not lobbying you on that except the value of the program. This product is composed of magazines, newspapers, slick stuff, and you can also use plastic milk containers and the individual beverage containers. Just chop them up, you don't have to take out the dye, you don't have to take out any of the other. Here it is, chopped up smaller, and this is a product that can be used as a plywood substitute.

You can have a plastic laminate, you can have a wood veneer laminate, you can put them together like plywood and even make beams out of them. These are things that we are trying to do. Imagine if we could get out of our landfills—you know what your landfills are doing probably the same as in my part of the country, and to be able to make something positive out of that kind of waste, I think is good for the future.

The other issue that I wanted to bring up is the Water and Waste Disposal Loans and Grants Program, and I have always supported the Clean Water Act and Safe Drinking Water Act, but, Mr. Chairman, it used to be that when the Federal Government was starting to demand secondary sewage treatment facilities, they had grants to help the small communities. These communities that

have such high unemployment rates that their land values have dropped enormously, they can't afford to meet regulations without Federal funding, and some kind of assistance, particularly in the smaller communities. I think that the act needs to be looked at and perhaps tailored to the size of towns and perhaps some better testing procedure, but let us try to assist those communities in doing what we are demanding of them.

Mr. DURBIN. Amen. We are hearing that over and over from small towns struggling to survive without safe drinking water and some of the basics we take for granted in big cities, they will not survive. I know you supported President Clinton's stimulus package, part of it was for rural sewer and water grants which will help solve some of those problems. There is a lot more to be done. Glad to have your support, and thanks for coming in with some success stories. It is good news.

Mrs. UNSOELD. Thank you. Keep up the good work.

[The statement of Mrs. Unsoeld follows:]

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POSTSECONDARY EDUCATION

Congress of the United States
House of Representatives
Washington, DC 20515-4703

Statement of the Honorable Jolene Unsoeld (WA)
House Appropriations Subcommittee on
Rural Development, Agriculture and Related Agencies
April 1, 1993

I have just returned from a three-day tour of western Washington with the Secretary of Agriculture. We showed him the results of decades of misguided or poor management of our natural resources -- and we showed him communities where more than 80% of the school children receive supplemental food, where food banks are serving 16.5% of the population, and one county with unemployment of 32.6%.

Mr. Chairman, I come to you to ask you and your committee to help both these timber-dependent communities and rural areas everywhere struggling to meet requirements of the Safe Drinking Water Act.

We in the Northwest are in the midst of an extremely painful transition until we have established with the leadership of President Clinton management practices that will lead to both sustainable habitat for diverse life and sustainable use of the resources -- this includes our forests, our water, and our salmon and other fisheries.

But let me give you an update on a success story from my district. Tom Mayr, second-generation owner of Mayr Brothers Logging, received a $5 million loan guarantee through the Farmer's Home Administration Business and Industrial Loan Guarantee Program. That loan guarantee saved 185 jobs in Hoquiam, Washington, one of the communities hardest hit by the timber crisis. It allowed Mayr Brothers to diversify from an old growth sawmill to one that uses the smaller second growth logs. Today, the Mayr Brothers new mill is up and running, and they have actually expanded their operation to 195 employees with additional expansion plans for the future.

I ask your assistance to help businesses like Mayr Brothers Logging diversify by increasing funding for rural development loan guarantees. For the Pacific Northwest this assistance will help us weather the monumental changes in federal forest policy.

Another program that has shown real results in the Northwest is the Resource Conservation and Development program. RC&D has developed a number of exciting local projects that have encouraged our timber communities to diversify and to find unique market niches.

Continued funding for these and other programs could help innovative endeavors such as the ECO-Manufacturing Company in Vancouver, Washington, get off and running. ECO-Manufacturing was developed by the worker/owners at Fort Vancouver Plywood Company, the oldest cooperatively owned plywood mill on the West Coast, to produce a new panelboard made out of recycled mixed waste paper, cardboard and plastic. Proposed plants are expected initially to employ over 30 skilled wood workers in "family wage" full time jobs and will utilize state-of-the-art technology to turn 120 tons of recyclable materials per day -- materials that would otherwise be headed for landfills -- into recycled panelboard construction products. These plants are expected to be located in timber-impacted counties in the state of Washington. These are the innovative ideas we must actively support, Mr. Chairman, if we are to overcome our natural resource management and waste disposal problems.

THIS STATIONERY PRINTED ON PAPER MADE OF RECYCLED FIBERS

I would also like to say a word of support for the Water and Waste Disposal loans and grants programs. I strongly support the goals of the Clean Water Act and the Safe Drinking Water Act, but I am troubled by the impossible task some communities face in attempting to comply with regulations.

As a result of the Safe Drinking Water Act, many small towns and rural areas in Southwest Washington and across the United States have been given regulatory orders to build water filtration and treatment facilities that they simply cannot afford. If the federal government is going to mandate this expensive program, it must also provide part of the technical and financial support needed to make the program work. As of March of this year, the Rural Development Administration reports over $1.8 billion in unfunded applications for water and waste disposal loans and grants programs.

In the small community of Klickitat, Washington, lack of resources to meet federal mandates set by the Safe Drinking Act is worsened by an already extensive debt from earlier attempts to meet federal drinking water regulations. In Aberdeen and Centralia, Washington, municipalities are required to build water filtration plants that they simply cannot afford. The problem is that the State of Washington received less than $7 million in loans and grants for drinking water programs in FY 92 which falls far beneath the need in the state.

Despite the best efforts of these small communities to provide safe drinking water supply to their people, deadlines set under the Safe Drinking Water Act are not being met. These communities need increased funding and technical assistance to meet these mandates.

NUTRITION LABELING AND EDUCATION ACT

WITNESSES

RICHARD MEYERS, NATIONAL NUTRITIONAL FOODS ASSOCIATION
STEPHEN SIMS, NATIONAL NUTRITIONAL FOODS ASSOCIATION

Mr. DURBIN. Richard Meyers and Stephen Sims with the National Nutritional Foods Association. From Costa Mesa, California. We have your testimony here. Thank you for joining us. We would appreciate your summarizing your request.

Mr. MEYERS. Thank you, Mr. Chairman, we will.

Chairman Durbin and members of the subcommittee, thank you for the opportunity to present the views of the National Nutritional Foods Association on the implementation of the Nutrition Labeling and Education Act. I am Richard Meyers, the legislative director of the NNFA. With me is Stephen Sims, the NNFA's Washington representative.

The NNFA is a trade association representing manufacturers, distributors, and retailers in the natural products industry. Our members sell whole foods, herbs, and dietary supplements. The approximately 13,000 businesses in our industry generate some $6 billion annually in revenue, pay hundreds of millions of dollars in wages, and most importantly, serve 10 million customers per week.

We very much appreciate the subcommittee's—the interest the subcommittee expressed in the FDA's regulation of dietary supplements when Commissioner Kessler testified. Our industry is very concerned with the FDA's implementation of a dietary supplement portion of the Nutrition Labeling and Education Act. Specifically, we fear that the FDA will promulgate rules that will deny millions of Americans the dietary information they need to improve their health and to help prevent deadly afflictions such as heart disease and cancer.

Such an action will cost the Nation millions of dollars in health care expenditures, which could have been saved through disease prevention. The NLEA was passed by Congress in 1990 in part to provide expanded and more accurate information concerning the health benefits of food products and dietary supplements. The FDA's proposed NLEA regulations reflected an unduly narrow view of the health benefits that could result from increased use of certain nutrients by an informed population.

Health care costs in our Nation are more than $2 billion per day, yet FDA continues to lag markedly behind the latest science in terms of promoting prevention as a cost effective means of maintaining wellness. For example, CDC and the U.S. Public Health Service recently concluded that folic acid supplements, when taken very early in pregnancy, can be important in the prevention of neural tube defects and have recommended the use of folic acid by all women of childbearing age.

The Texas State Department of Health is now providing folic acid supplements to women of childbearing age due to the high incidence of spinal birth defects among children born along the Rio Grande. Yet the FDA has rejected this health claim, denying unborn children an important means to prevent birth defects. Tragically, the FDA has also failed to recognize the link between

the consumption of anti-oxidant vitamins and a reduction in cancer risk, despite significant epidemiological evidence of this correlation.

Attached to my testimony is a memorandum summarizing a number of recent articles in respective medical journals which document the role of nutrition and supplement consumption in preventative health care. Moreover, the FDA's proposed regulations rejected several other congressionally-identified health claims, including the link between fiber consumption and long-term colon cancer prevention, a link that enjoys the near consensus of the scientific community.

When the proposed FDA regulations were published in the Federal Register in November of 1991, a strong outcry was heard throughout Congress. Not only from the dietary supplement industry but from the tens of millions of constituents who use and enjoy the benefits of dietary supplements. Consumers were outraged that the proposed regulations did not allow substantiated health claims for supplements so that American consumers could make better decisions about how to maintain their health.

In response to that outcry, the Congress enacted a one year moratorium on the implementation of the NLEA regulations relative to dietary supplements. This moratorium expires on December 31, 1993. In that act Congress directed the GAO and the OTA to issue reports to the Congress.

It is unlikely that the two reports will be available to the Congress prior to the deadline. Legislation will soon be introduced that will allow substantiated health claims for supplements and will address the matter of improper enforcement against dietary supplements by the FDA. The legislation will include strong consumer protection against misleading claims. Should this legislation not be enacted by the Congress and signed into law by the President prior to December 31, 1993, we believe that it is necessary for the Congress to delay the implementation of the FDA's regulations for one more year.

We, therefore, request that this committee consider legislation that would preclude the Secretary of Health and Human Services from using fiscal year 1994 appropriated funds to finalize or implement the NLEA regulations as they apply to dietary supplements.

Thank you, Mr. Chairman. We would be happy to respond to any questions that the committee may have on this matter.

Mr. DURBIN. You are going to have to help me a little more to understand what your problem is here. The value of fiber in reducing cancer has been so well published that a layman like myself knows that.

Mr. SIMS. Apparently that hasn't penetrated to the scientists that the FDA relies upon, unless a—

Mr. DURBIN. I think the problem is if you want to make a claim on a product.

Mr. SIMS. It has to be approved by the FDA or you can't make it.

Mr. DURBIN. Are you going through the process of approving the product?

Mr. SIMS. We completed a rulemaking and the majority of the scientific comment was in favor of that and quite a number of other health claims. However, the overwhelming majority of those were rejected by the FDA.

Mr. DURBIN. Well, the problem I see is, if you want to go through the ordinary process at FDA. I know it is painful, expensive, and long, but it will then allow you to make a health claim.

Mr. SIMS. Well, Mr. Chairman, some Members of Congress believe that the intent of the Congress was not carried out by the rulemaking, while others who disagree on this, we are introducing legislation perhaps even today in both the House and the Senate that we hope once and for all will take care of this problem and put ironclad definitions in place and solve the problem.

We are trying to solve it legislatively and on a bipartisan basis, I would add. However, it is unlikely, as you know, that such legislation could be enacted by the end of this year. Therefore, we are before you asking for a one year additional moratorium to give the Congress the time to enact this solution.

Mr. DURBIN. Let me see if I get the gist of it. If I have a box of cereal that I want to sell and put on there "high fiber", I have got no problems, but if I put on there "high fiber/prevents cancer", I get stopped by the FDA; right?

Mr. SIMS. We asked the FDA to allow the claim that high fiber may reduce the risk of cancer, which is what has been concluded by scientific study after scientific study. The FDA, unfortunately, rejected that particular formulation. They did allow certain other formulations having to do with fruits and vegetables and fats and things like that, but the consensus, as I sit here before you, as a layman who has learned all this in the last several months, it was astounding to me where the scientific consensus was and what the FDA rejected.

Mr. DURBIN. Well, I have had a pretty good relationship with that agency, and I also believe they have a pretty important job, to make sure that people who make false health claims are stopped. I heard your evidence and I heard your testimony, and I will consider other evidence on this, but, frankly, I want to make sure that I understand where your industry is coming from.

You do not want to be regulated through FDA, you just want to make certain health claims without going through FDA; is that correct?

Mr. SIMS. Well, health claims that are grounded in science. This industry doesn't want to have questionable health claims any more than you or any other member of this body does. What the legislation would do would establish a clear mechanism to get the proper health claims allowed and eliminate the ones that aren't allowed.

In fact, the proposed legislation would give the FDA enhanced power through rulemaking to eliminate whole categories of claims or products, and would actually increase consumer protection. The industry really has come of age and wants to have a rational and scientifically-based claim system.

Unfortunately, there is a 30-year or 40-year history of warfare between the FDA and the industry that just has not yet been overcome. I would note that Congresswoman DeLauro certainly understands how capricious the FDA can be, having had some experience with the scleroderma issue herself in the last Congress. And when I was on the Energy and Commerce Committee staff I had the pleasure of trying to work on that issue.

I would just note for the record that the FDA, even though it is held in very high esteem by most people, is not always the end-all and be-all in terms of either science or process.

Mr. DURBIN. No person or agency is perfect, and I have learned that over and over again.

We will be back in session starting around April 20th. I would like to have a representative of your association meet with me and whoever else is interested on the subcommittee and a representative of the FDA to learn a little bit more about this difference of opinion.

Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman. I think I recognize what your problem is. I was very interested in the part of your testimony and the linkage of anti-oxidants in the reduction of cancer. What are anti-oxidants? Give me an example.

Mr. SIMS. Well, vitamin C and vitamin E are the two principal anti-oxidants. Beta carotene has that effect.

Mr. SKEEN. Is there a whole series of pharmaceuticals that are classed as anti-oxidants?

Mr. SIMS. Well, not pharmaceuticals; these are natural products, vitamins. The effect that they have is that they help clean the free radicals out of your body that affect the DNA and are precursors to cancer, if I can oversimplify the matter.

Mr. SKEEN. Well, I need oversimplification. I appreciate it. Thank you. Thank you, Mr. Chairman.

Mr. DURBIN. Ms. DeLauro.

Ms. DELAURO. I just had one comment.

I am sorry I wasn't here for your testimony. It is very true that I have had conversations back and forth with the FDA on scleroderma, and their approval process. I also hear from a number of constituents on this natural products issue, and I also am very clear in telling them that I would very much like them to know what the outcome is so that anything they take is labeled properly, so I don't have a double standard, if you will. I just want to make sure that people have a real knowledge of what they are putting into their bodies, what they are taking, and what the potential side effects could be in any of these pills or supplements or anything else. That is something I am going to be specifically looking at because I am looking at the consumer protection side of the issue.

Mr. MEYERS. We would agree with all of that, and we would add that the consumer should also be made aware of the benefits, the potential benefits of the product.

Ms. DELAURO. I don't have any problem except as I say it may have been a bad batch, but L-tryptophan did certainly do a great damage to people that——

Mr. SIMS. I am glad you raised the L-tryptophan example because it really has very little to do with the issue we are here talking about today. The problem with L-tryptophan was not with amino acids. It was a contaminated batch, and it could have happened to hamburger cooked in Burger King or it could have happened to a prescription drug. There was—it proved nothing inherently about amino acids and their safety or lack of safety.

Ms. DELAURO. It also did have—the full range of side effects it had was not even known by the medical profession, and that is a

different issue. We need to understand what the potential problems or side effects could be without a contaminated batch for the future. That wasn't really even known by the medical profession.

Mr. SIMS. Well, the L-tryptophan was used in this country in dietary products and sleep aids for 20 years or more and had no problems, so I think the effect was pretty well known. The problem was not with the amino acid L-tryptophan as I understand it; the problem was there is a contaminated batch, and that could happen to almost any substance, and it was—I would hasten to add that it was a foreign-produced batch.

Ms. DELAURO. Yes, it was, it was Japanese-produced.

Thank you, Mr. Chairman.

Mr. DURBIN. Thank you, Ms. DeLauro.

Mr. Meyers, let me ask you one question. You said the FDA has rejected the health claim of folic acid being of benefit early in pregnancy. Can you tell me exactly what you mean by that?

Mr. MEYERS. One, the Congress specifically—when they passed the NLEA, Congress specifically directed the FDA to look at ten areas of nutrient disease links, sodium and hypertension, calcium and osteoporosis, lipids and cardiovascular disease. One of those links was folic acid and neural tube defects. When the FDA issued their regulations, they rejected the ability of manufacturers to make the claim on their label that there is a link between intake of folic acid and prevention of neural tube defects in fetuses.

Mr. DURBIN. Have they taken folic acid through the clinical trials, the FDA process?

Mr. SIMS. Well, it is not a drug, and so there is no requirement for clinical trials.

Mr. DURBIN. Now I see what we are getting at here.

Mr. SIMS. What we have is clear scientific studies in peer-reviewed medical journals that recommend that this folic acid be used for this purpose, and in fact the Centers for Disease Control and the United States Public Health Service both publicly recommend that women of childbearing age take folic acid, as well as the State of Texas, but this is rejected by the FDA.

Mr. DURBIN. I think your terms may be a little bit harsh.

Mr. SIMS. The ability to make that claim.

Mr. DURBIN. That is what we are getting at. If the company that makes the folic acid wants to make the claim, will avoid birth defects, on their product, they are going to have to go through the FDA process which obviously they don't want to do because it is very expensive.

Mr. SIMS. No, they went through the FDA process in the rule making and the FDA rejected the claim, so therefore they can't make the claim.

Mr. DURBIN. They haven't gone through the clinical trial process.

Mr. SIMS. The clinical trials are not—if they wanted—you are correct, if they wanted to file a new drug application and spend millions of dollars to go through phase one, two, and three clinical studies and prove it as a drug, they could do it, but no company in their right mind would do that because there is no patent or exclusive use that would attach to the product.

Mr. DURBIN. What I would like to do is this: if you would like to supplement this with any additional information, and please be se-

lective in what you send, I know you can probably inundate us with information. We are going to ask the FDA to also send us a memorandum in response and we are going to invite you back for an informal meeting with the subcommittee some time in April.

I hope you can make it. If you can't, we will try to rearrange it for your schedule.

Mr. SIMS. We will adjust our schedule to yours, Mr. Chairman.

Mr. DURBIN. Thank you very much. Thank you.

[The prepared statement follows:]

Chairman Durbin, Ranking Minority Member McDade and members of the subcommittee, thank you for the opportunity to present the views of the National Nutritional Foods Association on the implementation of the Nutrition Labeling and Education Act. I am Richard Meyers, the Legislative Director of the National Nutritional Foods Association.

The NNFA is a trade association representing manufacturers, distributors and retailers in the natural products industry. Our members sell whole foods, grains, vegetables, prepackaged products, herbs, and dietary supplements. The approximately 13,000 businesses in our industry generate some $6.5 billion annually in revenue, pay hundreds of millions of dollars in wages and most importantly, serve 10.5 million customers per week.

Our industry is very concerned with the Food and Drug Administration's (FDA) implementation of the dietary supplement portions of the Nutrition Labeling and Education Act (P.L. 101-535). Specifically, we fear that the FDA will promulgate rules that will deny millions of Americans the dietary information they need to improve their health and to help prevent deadly afflictions such as heart disease and cancer. Moreover, the FDA's narrow bureaucratic viewpoint will cost the nation millions of dollars in health care expenditures which could have been saved through disease prevention.

The NLEA was passed by Congress in 1990 in part, to provide expanded and more accurate information on the food label concerning the health benefits of food products and dietary supplements. Under the NLEA, the FDA was directed to evaluate the scientific evidence concerning specific nutrient/disease links to determine if health claims for these relationships were justified. Congress also directed the FDA to promulgate broad food labeling regulations with respect to both the content of foods and health claims for foods and dietary supplements.

The FDA's proposed NLEA regulations reflected an unduly narrow view of the health benefits that could result from increased use of certain nutrients by an informed population. Health care costs in our nation are more than $2 billion per day. Yet, FDA continues to lag markedly behind the latest science in terms of promoting prevention as a cost effective means of maintaining wellness. They are ignoring mountains of relevant data.

The Centers for Disease Control and Prevention and the U.S. Public Health Service recently concluded that folic acid supplements, when taken very early in pregnancy, can be important in the prevention of neural tube defects and has recommended the use of folic acid by women of childbearing age. The Texas State Department of Health is now providing folic acid supplements to women of childbearing age due to the high incidence of spinal birth defects among children born along the Rio Grande. Yet the FDA has

67-181 O—93——22

rejected this health claim, denying unborn children an important means to prevent birth defects.

Tragically, the FDA has also failed to recognize the link between the consumption of antioxidants and a reduction in cancer risk despite significant epidemiological evidence of this correlation. I would like to insert into the hearing record a memorandum summarizing a number of recent articles in respected medical journals which document the role of nutrition and supplement consumption in preventive health care.

Moreover, the FDA's proposed regulations, originally to be issued as final on November 8, 1992, rejected several congressionally identified health claims, including the link between fiber consumption and long-term cancer prevention -- a link that enjoys the near consensus of the scientific community.

Section 403 (r) (5) (D) of the NLEA directed the FDA to promulgate a scientific standard for the evaluation of health claims for dietary supplements. Furthermore, the statute allowed the FDA to craft a more lenient standard than the one used for foods. Nonetheless, the FDA's proposed regulations lumped food and dietary supplements together, under a health claims standard that, as I have pointed out, is far too stringent.

Under the proposed regulations, the FDA would not approve a health claim for a substance in a dietary supplement that contains more of that substance that the amount that is normally found in food. Such a substance is termed to be at a "therapeutic level," yet the FDA regulations did not define such levels. This means that potencies of vitamins, minerals and other supplements may be required to be reduced below useful levels in order for a health claim to be approved. We believe this represents a back door attempt by the agency to undermine Section 411 of the Food, Drug and Cosmetic Act which precludes limits on potency levels of dietary supplements. The regulations also appear to prevent herbal products from making health claims, as FDA has indicated that herbs do not have significant nutritional value.

When the proposed FDA regulations were published in the Federal Register in November of 1991, a strong outcry was heard throughout Congress, not only from the dietary supplement industry but from the tens of millions of constituents who use and enjoy the benefits of dietary supplements.

The FDA has not followed the original intent of Congress in promulgating the regulations. Consumers were outraged that the proposed regulations did not allow substantiated health claims for supplements so that American consumers could make better decisions about how to maintain their health.

In response to that outcry, last year Senator Orrin Hatch (R-UT) offered an amendment during consideration of the Senate Labor, Health and Human Services Appropriations bill. That amendment -- which passed by an overwhelming vote of 94-1 -- provided a one-year moratorium on the implementation of the FDA's NLEA regulations through December 31, 1993.

The amendment eventually passed the House as The Dietary Supplement Act of 1992 and was signed into law by President Bush (P.L. 102-571). In that Act, Congress directed the General Accounting Office (GAO) and the Office of Technology Assessment (OTA) to issue reports to the Congress. The GAO was directed to determine how FDA utilizes resources to regulate potential health risk and with respect to using dietary supplements. The OTA was to examine how other industrialized countries regulate dietary supplements and the health effects of these regulatory schemes.

In proposing his amendment, Senator Hatch stated that "a 1-year moratorium on NLEA rules pertaining to a dietary supplement of vitamins, minerals, herbs, or other similar nutritional substances would be helpful in allowing a more complete analysis of the complex issues surrounding the proper regulations of food supplements."

Legislation will soon be introduced into Congress that will allow substantiated health claims for supplements and will address

the matter of improper enforcement of dietary supplements by the FDA. The legislation will include strong consumer protection against misleading claims by mandating both compositional declaration on the labels of supplements and strengthening safety provisions.

It is our firm belief that Congress must legislate this matter before the FDA issues final rules on dietary supplement labels.

The "new" proposed NLEA regulations are to be published by June 15, 1993. However, the FDA will not have had time to take into consideration the GAO report mandated by the Congress which, although due by April 30, 1993, apparently will not be ready by June.

Should legislation that addresses this issue not be enacted by the Congress and signed into law by the President prior to December 31, 1993, we believe that it would be appropriate, and in fact necessary, for the Congress to delay the implementation of the Food and Drug Administration's regulations for one more year. We therefore request that this committee consider legislation that would preclude the Secretary of Health and Human Services from using fiscal year 1994 appropriated funds to finalize or implement the NLEA regulations as they apply to dietary supplements.

Thank you, Mr. Chairman.

Since 1936
NNfA
National Nutritional Foods Association

Role of Nutrition in Preventive Health Care: Supporting Data

Introduction

Recent research, much of it performed during the past decade, has shown that good nutrition can prevent or delay a number of serious chronic disorders. The Surgeon General's Report on Nutrition and Health, issued in 1988, listed the ten leading causes of death in the United States and described five of them as diet-related. It can readily be seen that improving the nutritional intakes of the American public can markedly reduce the costs of health care- both human and financial.

From literally hundreds of scientific articles we have selected the following to demonstrate the strength and variety of the evidence which supports the potential role for diet and supplements in a total health care plan.

Annotated Bibliography

* **The data support a role for antioxidants in reducing cancer risk.**
Block, G.
Nutrition Reviews 50, 207-13 (1992)

In this Science/Policy article Dr. Block advocates approval of a health claim of the general form: "A diet high in antioxidant vitamins may help reduce the risk of some cancers." After discussing the evidence to support this claim she points out the low antioxidant nutrient status of the U.S. population.

* **Fruit, vegetables, and cancer prevention: a review of the epidemiological evidence.**
Block, G. et al
Nutrition & Cancer 18, 1-29 (1992)

This article reviews some 200 studies that examined the relationship between fruit and vegetable intake and cancers of the lung, colon, breast, cervix, esophagus, oral cavity, stomach, bladder, pancreas, and ovary. For most cancer sites the lowest fourth of the population (in consumption of fruits and vegetables) have about twice the risk of cancer compared to those with high intakes. The authors conclude: "It would appear that major public health benefits could be achieved by substantially increasing the consumption of these foods."

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* **Vitamin C intake and mortality among a sample of the United States population.**
Enstrom, J.E. et al
Epidemiology 3, 194-202 (1992)

By analyzing data from a major survey of diet in some 11,350 individuals, this study found that high vitamin C intake, both in food and supplements, reduced mortality rates from cancers, cardiovascular diseases and all causes considered together. An accompanying editorial by Block points out that, "In the United States, plasma ascorbate (vitamin C) levels are disturbingly low in major segments of the population, reflecting equally disturbing low intake."

* **Dietary calcium and risk of hip fracture: 14-year prospective population study.**
Halbrook, T.L. et al
Lancet Nov. 5, 1988, 1046-9

An inverse association was found between calcium intake and the risk of hip fracture in a group of 957 Californians. The authors estimate annual costs of $6 billion in the US related to hip fracture, and state that their results strongly support a protective role for increased calcium intake.

* **Risk of angina pectoris and plasma concentrations of vitamins A,C, and E and carotene.**
Riemersma, R.A. et al
Lancet 337 (8732), 1-5 (1991)

In this study vitamin E levels in blood plasma were shown to be inversely related to the risk of angina, with an increased risk in the lowest fifth of the study population almost 3x that of the highest fifth. Inverse relationships between angina and carotene and vitamin C plasma levels were found in smokers.

* **Association between nutritional status and cognitive functioning in a healthy elderly population.**
Goodwin, J.S. et al
Journal of the American Medical Association 249, 2917-21 (1983)

This study of 260 men and women above 60 years of age found a correlation between low plasma levels of certain vitamins and poor memory and abstract thinking ability. These subjects were non-institutionalized; similar results might well be expected in institutionalized elderly subjects (cf Bell et al., J. American Geriatric Society 39, 252-7 [1991])

* **Prevention of the first occurrence of neural-tube defects by periconceptional vitamin supplementation.**
Czeizel, A.E. and I. Dudas
New England Journal of Medicine 327, 1832-5 (1992)

In this randomized controlled trial a multivitamin/mineral supplement or a trace mineral supplement was given daily for at least one month prior to conception and up to the date of the second missed menstrual period to a test population in which 4,750 pregnancies were confirmed. No neural-tube defects were found in the group given the vitamin/mineral supplement while six such defects occurred in the other group.

* **Vitamin B-12 and folate intakes and plasma levels of black adolescent females.**
Reiter, L.A. et al
Journal of the American Dietetic Association 87, 1065-7 (1987)

In a group of 39 healthy black adolescent girls, dietary folic acid intakes were less than two-thirds of the RDA in 97%, while 74% had plasma folic acid levels indicative of marginally deficient folate status.

* **Effects of fish oils and polyunsaturated omega-3 fatty acids in health and disease.**
Special Bibliography 1992-A, Specialized Information Services, National Library of Medicine

This is a listing of 775 citations in the literature from August 1990 through September 1991 collected by an agency of the U.S. Department of Health & Human Services. It demonstrates the wide variety of pathologies in which fish oil supplements and fish in the diet can be beneficial.

* **Vitamin E supplementation, plasma lipids and incidence of restenosis after percutaneous transluminal coronary angioplasty (PICA)**
DeMaio, S.J. et al
Journal of the American College of Nutrition 11, 68-73 (1992)

Supplements (1200 IU/day) of vitamin E were given to some patients after a procedure (angioplasty) to remove plaque from coronary arteries. The study was double-blind and placebo controlled. After four months narrowing of the arteries had re-occurred in 50% of the placebo-treated patients compared to 35% of those taking vitamin E. The difference was not significant due to an inadequate sample size. The wide range of vitamin E's functions are described in a review published by the Vitamin E Research and Information Service (VERIS) in January, 1993. This review, with 151 references, covers research on cancer, circulatory disorders, cataract, aging and air pollution.*

* **Antioxidants in the prevention of human atherosclerosis**
Steinberg, D. et al
Circulation 85, 2337-43 (1992)

This summary of an NIH-sponsored workshop discusses the evidence for a role of antioxidants in prevention of atherosclerosis and outlines areas for further research. It cites studies showing inverse relationships between coronary heart disease risk and intakes of vitamin E and beta-carotene.

* Copies of this review or futher information are available from VERIS at 1-800-554-1708.

SOIL CONSERVATION PROGRAMS

WITNESS

BILLY WILSON, NATIONAL WATERSHED COALITION

Mr. DURBIN. Billy Wilson of the National Watershed Coalition.

Welcome to the subcommittee, Mr. Wilson. We have your testimony, and it will be included in the record in its entirety. If you would like to summarize it.

Mr. WILSON. First of all, I would like to say thanks, Mr. Chairman and members of the subcommittee, for allowing me to come here today. I must admit that when I received your letter that said we were going to do this on April Fool's Day at 5:00 p.m.—

Mr. DURBIN. You weren't sure.

Mr. WILSON. I wasn't very sure. So I came early and made sure this wasn't an April fool's joke. But I do appreciate your working late and the staff working late, and I can't help but wonder if your constituents believe that you work late.

Mr. DURBIN. If you want to drop a letter to my hometown newspaper or Mr. Skeen's, we would be happy.

Mr. SKEEN. We appreciate the compliment.

Mr. WILSON. I would like to introduce myself. I am Billy Wilson and represent the National Watershed Coalition.

I am a rancher/farmer from east central Oklahoma, and I have traveled here to present the position of the 26 members of the National Watershed Coalition as it pertains to the USDA soil conservation as far as the watershed program that has been in effect since back in the late 1940s I guess. We certainly appreciate the efforts of this subcommittee.

The Coalition has reviewed the status of this program, obtaining information from our membership, many local sponsors and the USDA Soil Conservation Service. After careful study, we have concluded that much work remains to be done through this program.

Four years ago we were looking at an approximate 20-year backlog of planned projects given the level of funding at that time. Since then, we have seen this backlog reduced to about 15.7 years at the current rate of funding. The Coalition applauds the efforts of this subcommittee during the past four years. We urge you to continue this kind of support for this important program to help solve the problems of flooding, sediment loading of streams, rural water supply for farms, industry and communities, and to help provide jobs to spur the economy.

On the jobs issue figures in the structural part of the program, we have figures that support that every one million of Federal funding results in 1.6 million in jobs and in an average of 500,000 in materials that are purchased for these projects. So we are certainly supportive of the President's initiative to create jobs and spur the economy in this country, and this program can help do that.

And without any further comments I would take any questions. I know time is short, and I would appreciate it if you would include my testimony in the record. And, with that, I am going to conclude.

Mr. DURBIN. I can guarantee you that, Mr. Wilson, this testimony will be included in its entirety.

Mr. DURBIN. It seems like our backlog is still pretty deep here at a little over 15 years, for this funding. Can you tell me what impact I can tell my folks in the cities that this kind of investment in watershed is going to have on water quality in the United States?

Mr. WILSON. Water quality—it is interesting that you mention that because water quality is something we can certainly have the authority within this law to do. And we are beginning to incorporate water quality aspects in these projects.

One of the things that is a requirement of this law is that 85 percent of the land above a particular structure be under a conservation plan. That has been a requirement all along. We have not been taking or accounting for the benefits of water quality as we worked out cost-benefit ratios and things in this program, but we certainly intend to do that.

There is also the authority to do just land treatment type programs. We have the authority since the 1990 farm bill to incorporate the wetlands and to create wetlands and do a lot of the environmental things within this program. The authority is already there.

And we are really excited about advancing the natural resource part of this program. And many of our members—you can tell by the membership list, I think—certainly come from that side of the industry. So there is definitely water quality benefit that can be derived from—not only from the structure side of this program but the benefits from the land treatment part of it as well.

Mr. DURBIN. Let me tell you I am sure in Oklahoma, as in Illinois, we are wrestling with this whole concept of wetlands and how to cope with it. I hope we can sort that out so all of us who want to see them protected and enhanced have an efficient program that a producer can understand and work with.

Mr. WILSON. Our producers in Oklahoma have been given a strategy. I met this week with the Corps of Engineers in Fort Belvoir to give them ideas about that, and, of course, the National Academy of Science is doing a study right now to determine a definition nationally. And you and I would like to see that, I am sure, but we are working real hard.

Mr. DURBIN. I wish that was the only agency you had to stop in when you talk about wetlands. But you still have Fish and Wildlife, EPA and USDA before you go back to Oklahoma. Thank you very much for joining us.

Ms. DeLauro.

Ms. DELAURO. No questions.

Mr. DURBIN. Thank you so much for coming a long way to be with us today.

Mr. WILSON. Thank you.

[The prepared statement follows:]

NATIONAL WATERSHED COALITION

Robert E. Raschke
Chairman

MEMBERS
Nat'l Assn of Conservation Districts
Assn of State Floodplain Managers
Interstate Council on Water Policy
Nat'l Assn of State Conservation Agencies
Soil & Water Conservation Society
Nat'l Assn of Flood & Stormwater Mgmnt Agencies
Assn of State Dam Safety Officials
Associated General Contractors of America
Land Improvement Contractors of America
Tombigbee River Valley Water Mgmnt District
State Assn of Kansas Watersheds
Oklahoma Conservation Commission
Pennsylvania Division of Conservation Districts
South Carolina Land Resources Conservation Commission
Texas Soil & Water Conservation Board
West Virginia State Soil Conservation Agency
Alabama Assn of Conservation Districts
Kansas Assn of Conservation Districts
Mississippi Assn of Conservation Districts
Oklahoma Assn of Conservation Districts
South Carolina Assn of Conservation Districts
Assn of Texas Soil & Water Conservation Districts
Virginia Assn of Soil & Water Conservation Districts
West Virginia Soil & Water Conservation District Supervisors

STATEMENT OF

THE NATIONAL WATERSHED COALITION

PRESENTED TO THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,

FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES

ON

FISCAL YEAR 1994 WATER RESOURCES APPROPRIATIONS

FOR USDA, SOIL CONSERVATION SERVICE

APRIL 1, 1993 5:00 PM

Mr. Chairman, and members of the committee, I am Billy Wilson, Chairman of the Congressional Relations Committee of the National Watershed Coalition. The Coalition (NWC) is an alliance of national and state organizations and associations who directly represent more than 60,000 constituents nationwide. NWC advocates total resource management using the small watershed concept when dealing with natural resources. Further, NWC supports use of USDA's Watershed Protection and Flood Prevention Program (PL 83-566) as one of the best vehicles for planning and implementing water resources protection measures.

On behalf of the twenty-six member organizations of the Coalition, I want to take this opportunity to present our recommendations for FY1994 appropriations for the Small Watershed Program (PL 83-566).

The Coalition has reviewed the current status of this program obtaining information from our membership, many local sponsors and USDA Soil Conservation Service. After careful study, we have concluded that much work remains to be done through this program. Four years ago we were looking at an approximate 20 year backlog of planned projects given the level of funding at that time. Since then, we have seen this backlog reduced to about 15.7 years at the current rate of funding. The Coalition applauds the efforts of the members of this subcommittee during the past four years. We urge you to continue this kind of support for this important program to help solve the problems of flooding, sediment loading of streams, rural water supply for farms, industry and communities, and to help provide jobs to spur the economy.

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The Coalition appreciates this Committee's strong support for the President's economic stimulus package wherein much needed funds are to be allocated to speed implementation of some of these beneficial projects already planned and awaiting funding.

Due to reduced funding over the past 15 years, there are over 85 small watershed projects awaiting approximately $150 million federal funding for implementation, projects that were conceived by local sponsoring organizations who are committed to improving their common local problems. They have committed their state and local resources to completion of their share of the cost of this work and have obtained all needed land easements. All of these projects have been planned in an environmentally sensitive manner based upon the total natural resources within each watershed area.

Many projects include important structural measures. Each structural project with one million dollars of federal funding will result in approximately $1.6 million worth of work. This does not include the multiplier effect caused by the more than $500,000 included in this amount for construction materials that would be used in the completed works.

For 1994 appropriations, the National Watershed Coalition recommends the Committee increase the level of funding for these water resource programs for planning and implementation of important conservation projects:

PROGRAM	1992 ENACTED	1993 ENACTED	1994 REQUEST
	(Funding in $million)		
River Basins	13.2	13.2	30.0
Watershed Planning	9.6	9.6	15.0
Watershed Operations			
PL 78-534	36.1	40.3	75.0
PL 83-566	149.1	165.2	250.0
Emergency Watershed Prot.	20.0	22.8	20.0
Wetland Acquisition	0.0	0.0	10.0
Project Rehabilitation	0.0	0.0	60.0

The funding levels of the past few years have not been sufficient to allow for serving all the requests for assistance from interested groups across the country. More and more local groups are seeing the need to take responsibility for their critical water resources such as water quality improvement, and they are increasing their requests for assistance in addressing these problems.

Many nonstructural watershed protection projects are proposed that, when implemented, will significantly decrease nonpoint source pollution resulting in improved downstream water quality.

River Basins - The level for this program should be increased in order to service requests from many states for broad-based planning which will identify water quality problems and opportunities, prioritize them and identify appropriate implementation program authorities.

Watershed Planning - SCS has been receiving many requests for watershed planning, especially with the emphasis now being placed on land treatment projects for nonpoint source pollution control. Local sponsoring organizations are also requesting assistance for planning based on total resource management. (The watershed program with its interdisciplinary planning techniques is ideal for this.)

Watershed Operations -

PL 78-534 - funds used to implement small watershed projects in the eleven watersheds authorized in 1946 in 15 states.

PL 83-566 - funds used to implement the multipurpose watershed projects planned through the watershed total resource management approach, projects in all states.

Emergency Watershed Protection - funds used to relieve imminent hazards to life and property caused by natural disasters, such as fires or floods.

A significant increase for watershed operations funds is needed to restore the program to the level demanded by the public, and to address the backlog of projects that are awaiting funding. The increase is also needed to provide funds for implementing the many new water quality improvement initiatives coming forth.

Wetland Acquisition - The 1990 Farm Bill added an authority in PL 83-566 to assist local sponsoring organizations acquire wetlands or floodplain easements to retain excessive floodwaters, improve water quality and provide habitat for fish and wildlife. However, this authority has never been funded. Funds at this minimum level should be provided so this valuable tool to address some of our nation's critical concerns can be utilized.

Project Rehabilitation - Our nation's infrastructure is growing older. A significant part of that infrastructure is the flood protection dams and related structural measures installed in our upstream watersheds. Many of these structures can, if properly rehabilitated, continue to provide the benefits that downstream landusers have enjoyed over the years. Special funds need to be provided to assist these local sponsors bring these structural measures to within today's standards for safety.

ALTERNATIVE PEST CONTAINMENT AND QUARANTINE FACILITIES

WITNESS

PAULA HUGHES UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES

Mr. DURBIN. Paula Hughes testifying today for Dr. Kenneth Farrell. She is with the University of California Division of Agriculture and Natural Resources. Would you be from Sacramento?

Ms. HUGHES. No. I am in Washington. I have the best of all possible worlds. I go back often.

I am here today on behalf of Dr. Farrell, who is the Vice President of Agriculture and Natural Resources for the University of California. He was unable to attend today due to a commitment in the State. I will be very brief, knowing that my statement will be included for the record.

I am here today to give you an update on the status of the University of California's alternative pest containment and quarantine facilities project. We have received appropriations from this subcommittee the last two fiscal years, and this project includes the construction of state-of-the-art pest management research facilities at two sites and will provide significant benefit to growers, ranchers, environmentalists and consumers as well. The new technologies will lead to reduced applications of pesticides and chemicals through the use of biological control agents and other cutting-edge technologies.

Certainly the discovery of a resistant strain of whitefly, along with the Mediterranean and Mexican fruit flies and the arrival of the Africanized honeybee all join a growing list of pests and diseases that threaten the long-term health and economic vitality of American agriculture.

American farmers are faced with the wholesale loss of synthetic pesticides which they have relied upon for control and eradication and now find themselves at risk for a broad array of damaging pests. Equally disturbing is the increased resistance developed by many pests. As a result, agriculture is in danger of a reduced quality of production, and we could see access to many foreign markets closed or severely restricted.

Construction of these facilities will enable USDA, the California Department of Food and Agriculture, the University of California and other universities and States to collaborate and accelerate current research efforts in the pursuit of cutting-edge advances in pest management.

We thank you for your support in the past, and we hope that you can continue to support this effort.

Mr. DURBIN. I am learning a lot about the whiteflies on this subcommittee and the problems it is presenting across the United States. We wish you the very best in your research efforts.

And, as I have asked previous witnesses before the committee, when someone takes a cheap shot at agriculture research I hope that you and your friends will be quick to defend some of the efforts we are making to try to make sure that folks across America have a good nutritious supply of food and fiber. Thank you.

Ms. DeLauro.
Ms. DeLauro. No questions.
Mr. Durbin. Thank you for joining us.
Ms. Hughes. Thank you.
[The prepared statement follows:]

TESTIMONY OF KENNETH R. FARRELL, UNIVERSITY OF CALIFORNIA VICE PRESIDENT FOR AGRICULTURE AND NATURAL RESOURCES, BEFORE THE HOUSE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES
PRESENTED ON APRIL 1, 1993

Mr. Chairman and Members of the Subcommittee:

My name is Kenneth R. Farrell and I am Vice President for Agriculture and Natural Resources at the University of California.
I appreciate the opportunity to appear before the Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies today to provide testimony in support of continued funding for the University of California's Alternative Pest Containment and Quarantine Facilities project. The project, which has received an appropriation from Congress in both USDA-CSRS's fiscal year 1992 and 1993 budgets, involves construction of modern, state-of-the-art pest management research facilities at two sites. The facilities, once on-line, will provide significant long-term benefits to growers, ranchers, environmentalists and consumers in the United States from new technologies leading to reduced applications of pesticides and other chemicals through expanded use of biological control agents, genetically-engineered organisms and other "cutting-edge" technologies.

Before describing the project in more detail and our reasons for requesting funding for two facilities, I would like to provide you and the members of the Subcommittee with a brief summary of the events that led to Congress providing initial funding for the project.

Background

In July 1990, the University of California released an in-depth study of available pest management alternatives that showed conclusively that economically-viable and environmentally-compatible alternatives were not available for many of the pesticides and chemicals used by agriculture. At the same time, urban Californians were demanding a halt to aerial spraying to control infestations of Mediterranean and Mexican fruit flies and the national debate over the widespread use of pesticides in agriculture and their long-term impacts on environmental quality continued in many quarters.

In response to these and other pressing events, the Conference Report from the House and Senate Agricultural Appropriations Subcommittees for fiscal year 1991 directed USDA to conduct a study of proposed alternative pest containment and quarantine facilities in California. As a result, USDA-CSRS requested the University of California

to submit a needs assessment for new facilities designed to support pest management research by scientists in the western region of the United States as well as California. The facilities would be funded on a cost-share basis between USDA and the State of California.

A needs assessment was transmitted to USDA-CSRS on May 1, 1991 and a USDA facility study panel subsequently conducted a site visit to the University of California's Davis and Riverside campuses between June 4-6, 1991 . The panel's report was very favorable and concluded with the recommendation that "[W]ithout regard to source of funding, the review panel has concluded that this is an important, necessary facility (sic), the construction of which could have a significant impact on U.S. agriculture."

In fiscal year 1992 Congress provided an initial appropriation of $207,000 in the USDA-CSRS budget for planning and pre-design work associated with the proposed facilities at UC Davis and UC Riverside. An additional $178,000 was appropriated in fiscal year 1993. These appropriations have been matched by the University of California. The project has received considerable bipartisan support from the California Congressional Delegation (see attached letter of May 28, 1992 to former House Committee on Appropriations Chairman Whitten) and other members of Congress.

Now that I have provided background information on the project's history and the rigorous peer review conducted by USDA-CSRS, I would like to turn to the more immediate question of why these modern research facilities are needed. I also would like to give you and the members of the subcommittee more specific details on the proposed facilities, our estimate of total construction costs, and the federal government's projected share.

The Issue

The discovery of a resistant strain of whitefly in Arizona, California and Texas that attacks most crops, outbreaks of Mediterranean and Mexican fruit flies in California, and the arrival of Africanized honey bees in the Southwest join a growing list of pests and diseases that threaten the long-term health and economic vitality of American agriculture.

American farmers, faced with the wholesale loss of many of the synthetic pesticides and chemicals that they have relied upon for control and eradication now find themselves at risk from a broad array of insect, microbial and other potentially damaging pests. Equally disturbing is the increased resistance that many pests have developed to compounds that remain on the market. **Unless immediate action is taken**, agriculture is not only in danger of losing the on-going battle against pests--with subsequent

reductions in the quality of food and fiber produced--but could see access to many foreign markets closed or severely restricted.

While research into promising new pest management technologies and strategies has met with some success over the past decade, most notably in the areas of integrated pest management, biological control, and bioengineering, nothing short of a major expansion and acceleration of research focusing on long-range solutions is required.

If science is to meet this challenge, it is imperative that researchers have modern, environmentally secure facilities and adequate funding to develop and test a broad range of pest management alternatives. However, recent studies requested by Congress and the California State Legislature have concluded that existing pest management research facilities in the United States as a whole are woefully inadequate and outdated. The studies further recommend that construction of state-of-the-art research laboratories should be a high priority in California and nationally.

The Proposal

In response to these critical needs, the University of California, in cooperation with USDA, the California Department of Food and Agriculture, commodity groups, and other interested parties, propose the construction of new pest management research facilities at two California locations. Once operational, these modern containment and quarantine facilities will support a comprehensive, integrated program designed to draw upon the breadth of university, state, and federal expertise within California and the western region. The proposed facilities include:

UC Riverside: **an 18,000 asf laboratory and support facilities designed to accelerate research leading to the development of biological and other natural controls for the whitefly and a range of other pests ($10 million total cost); and**

UC Davis: **a 39,000 asf containment and quarantine facility supporting research into environmentally-compatible pest management strategies including bioengineering, genetically-altered organisms, and other promising biotechnology applications for the control and eradication of whiteflies and other pests ($25 million total cost).**

Construction would be sequenced, with the biological control laboratory at Riverside proposed for completion by fiscal year 1996 and the biotechnology and bioengineering containment facility at Davis on-line during fiscal year 1997. Funding would be provided on a cost-share basis through the USDA-CSRS building and facilities grants program and the State of California. UC also would provide land at each site and assume the cost of staffing and operating the facilities once they are completed.

Justification for Federal Funding

The federal-state partnership that supports agricultural research has led to significant breakthroughs and advances over the past century to the benefit of every American consumer. This research also has helped build an export industry that generates billions of dollars annually in net income to the US economy. Construction of the proposed pest containment and quarantine facilities in California would enable scientists from USDA, CDFA, UC, and other universities in the western region not only to accelerate current research efforts, but to collaborate more effectively in pursuing the "cutting-edge" advances in pest management practices and new technologies that will be needed to meet tomorrow's challenges.

Location of these facilities at UC Riverside and UC Davis is justified because of the significant concentration of nationally recognized scientists on the two campuses with expertise in integrated pest management, biological control, plant pathology, entomology, toxicology, plant genetics, and molecular biology. UC scientists, in turn, would benefit from closer collaboration with USDA scientists and visiting scientists from other universities who are working on solutions to controlling whiteflies, fruit flies and other pests. The combined resources of this federal-state partnership would permit a focused, mission-oriented research program on a scale not otherwise possible.

Further, the proposal to construct two separate facilities is based on programmatic and economic reasons as well as the existing concentration of core groups of researchers at UC Riverside and UC Davis with expertise in the biological control and biotechnology sciences, respectively. Specifically, the costs to build a single containment and quarantine facility that could incorporate the diverse and quite separate requirements necessary to conduct research into biological control alternatives versus developing new bio-engineered and genetically-altered organisms are estimated to be at least as much, if not more, than constructing two facilities.

Estimated Federal Capital Investment

As mentioned earlier, Congress approved $207,000 in the USDA-CSRS budget for fiscal year 1992 and $178,000 in fiscal year 1993 to assist UC in initial design work. The University is matching these funds.

Additional federal funding for the facility at UC Riverside is estimated to be $5.0 million; with $0.75 million required in fiscal year 1994 and $4.25 million in fiscal year 1995. The federal match for the UC Davis facility is estimated to be $12.5 million; with $0.5 million required in fiscal year 1994, $4.5 million in fiscal year 1995, $4.5 million in fiscal year 1996, and $3.0 million in fiscal year 1997. The State of California would provide matching funds over roughly the same time period.

Mr. Durbin and members, I wish to thank you again for the opportunity to address the Subcommittee on this capital outlay project which promises to benefit all Americans. Ms. Paula Hughes from the University of California's federal relations office here in Washington and I would be pleased to answer any questions that you or the other members may have.

RURAL ECONOMIC DEVELOPMENT

WITNESS

HON. FRANK McCLOSKEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF INDIANA

Mr. DURBIN. From the State of Indiana, my friend and colleague, the Honorable Franklin Delano McCloskey.

Mr. MCCLOSKEY. I don't know what to say, Mr. Chairman.

Mr. DURBIN. Just keep it short, whatever it is.

Mr. MCCLOSKEY. It will be exceedingly short, and I know, Mr. Chairman, you will accept my prepared statement for the record.

Mr. DURBIN. In its entirety.

Mr. MCCLOSKEY. As you know, the 1990 farm bill had a grant program designated for rural economic development particularly to have states establish 16-member panels and develop their own programs with a mix of state and Federal funds. That was Section 2316 of that bill. Subsequently, as you know, money had previously not been appropriated.

Indiana is in the process of creating such a panel. They are very interested. The lieutenant governor, the governor's office and particularly some key staff have contacted me about it. If you could look favorably on that request, Indiana, particularly southern Indiana where I live and which is very rural, would be very appreciative.

End of statement, sir.

Mr. DURBIN. Thank you.

And let me just say this: I believe that the Agriculture Committee authorized about 50 more programs than we have the money to fund, and this, unfortunately, has been one of them.

But we are both interested in this. We have similar challenges in the rural economy, and I would like to work with you and my colleagues who feel that way, to make sure that with the President's new idea of rural development initiative, we can blend them together so we can try to get our economy moving again in Indiana and Illinois.

Ms. DeLauro.

Ms. DELAURO. I have no questions. I'm just happy to see my colleague.

Mr. DURBIN. Thank you for joining us.

Mr. MCCLOSKEY. Thank you.

[The prepared statement follows:]

TESTIMONY OF REPRESENTATIVE FRANK McCLOSKEY BEFORE THE HOUSE APPROPRIATIONS COMMITTEE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES, IN SUPPORT OF FUNDING FOR A RURAL ECONOMIC DEVELOPMENT REVIEW PANEL, AS AUTHORIZED BY THE 1990 FARM BILL
April 1, 1993

Mr. Chairman, I appreciate the opportunity to appear before you today to urge that the Subcommittee approve funding for and important grant program created by the 1990 Farm Bill. The program for which I am seeking support is the State Rural Economic Development Review Panel.

As you may know, prior to passage of the Food, Agriculture, Conservation, and Trade Act of 1990, more commonly know as the 1990 Farm Bill, all federal rural development programs were administered by the various U.S. Department of Agriculture (USDA) agencies. No role was reserved for state governments.

However, Title XXIII of the 1990 Farm Bill included provisions to institutionalize a state role for those states willing to create a 16-member State Rural Economic Development Review Panel (SREDRP). Section 2316 of the Bill further provided that USDA conduct a pilot program for interested states in order to aid those states in the establishment of SRDRPs.

The pilot program of any given state is not to exceed five years in length, and no more than five states can conduct pilot programs at one time. The Bill also authorized appropriations for USDA grants, of up to $100,000 annually per state, to help the states meet the administrative costs of their pilot SREDRP programs. However, perhaps as a result of the past lack of USDA grant funds to help establish such programs, no state has, until now, endeavored to create a SREDRP pilot program.

Nonetheless, the State of Indiana has committed to efforts to direct rural development with its boundaries. To that end, it created the Indiana Commission for Agriculture and Rural Development in 1988. It also is working to create a Rural Economic Development Council.

After the final regulations for the operation of SREDRPs were promulgated by the USDA on April 6, 1992, Indiana applied to become a pilot state under Section 2316 of the Farm Bill. Subsequently, Indiana was informed that it will have the distinction of being the first state to establish a SREDRP.

The Indiana Office of the Commissioner of Agriculture has determined that administrative and personnel costs associated with its three-year pilot SREDRP program will be $165,000 per year. Indiana would be able to apply for grant funds for its SREDRP program if the Subcommittee removed previous funding barriers, and permitted the SREDRP pilot program to be funded as was intended under Section 306(a) of the Consolidated Farm and Rural Development Act.

Again, Mr. Chairman, I strongly urge that the Subcommittee make funds available within the USDA FY 1994 Budget for the implementation of the SREDRP grant program. Full establishment of a viable SREDRP in Indiana could revitalize rural economic development there, and ultimately, throughout the nation.

NATIONAL AGRICULTURAL LIBRARY

WITNESS

ANNE A. HEANUE, THE UNITED STATES AGRICULTURAL INFORMATION NETWORK

Mr. DURBIN. Elaine Albright of the U.S. Agricultural Information Network. I think you have heard the drill here. Your statement will be part of the record. If you will be kind enough to summarize, we would appreciate it.

Ms. HEANUE. I must tell you I am not Elaine Albright. I am Anne Heanue of the American Library Association, and Elaine Albright has been snowed in in Maine I think. April fool.

Mr. DURBIN. How do you spell your last name?

Ms. HEANUE. It is H-E-A-N-U-E.

Mr. DURBIN. Thank you. Please proceed.

Ms. HEANUE. Elaine Albright is the Dean of Cultural Affairs and Libraries at the University of Maine. She was speaking to you today both as a librarian and also as the Chair of the Legislative and Government Committee of the United States Agricultural Information Network, and the Network is requesting a budget increase of $4 million for the National Agricultural Library in fiscal year 1994.

The NAL has experienced a static and therefore decreasing budget in the last few years. As I am sure you know, too, the rising cost of journals, books, programs and services means that this static budget is, in effect, a decreasing budget. And they are falling well behind in their ability to support research and development by agricultural researchers in this country.

These increases in journals and so on have increased by an average of 15 percent per year. And since it takes about 15 percent a year just to maintain current services, then I am requesting your support of a budget increase that recognizes high inflation and that includes a sum to reinstate canceled journal subscriptions and allow for the purchase of new information.

The National Agricultural Library has pilot tested the conversion of a few of its unique and valuable materials into electronic format to make information available to a wide range of researchers wherever they are located and provides for remote access and fast document delivery. NAL's leadership in this highly sophisticated and critical area is being jeopardized by insufficient budget for personnel and for state-of-the-art computer equipment. And so we ask your financial support for these projects by making them a strong priority in the fiscal year 1994 budget.

We are also very concerned that NAL and agriculture researchers are having a very difficult time with crumbling and deteriorating collections. NAL, in many cases, has the only copy of some information in the world. These are quickly deteriorating due to environmental conditions and to the chemical composition of paper that these materials were printed on.

And the Department of—rather, the National Library of Medicine and the Library of Congress have well-funded preservation programs, but the National Agricultural Library has no preservation budget and can't even begin to address this problem. So we are

asking that $1 million be set aside to begin the preservation of this enormous investment that has already been made to build the present NAL collection.

The last initiative that I will address is NAL's library networking program. In recognizing that neither the Library of Congress nor the National Library of Medicine and certainly not the National Agricultural Library will be able to respond to all the information needs of researchers, NAL has again provided leadership for land-grant libraries to participate in programs that share local resources with researchers worldwide.

Most research libraries because they, too, are faced with decreasing budgets and static budgets have become more provincial in defining their service constituencies at a time when sharing resources is really the only logical alternative to everybody buying everything they need. More than ever before, it is imperative that NAL expand its resources to guarantee the use of all the Nation's resources for the agricultural community.

We do thank you very much and would ask that you support this request for an increase in the National Agricultural Library's budget.

Mr. DURBIN. Thank you, Ms. Heanue.

The budget for the National Agricultural Library I see was frozen last year, and I know that makes it increasingly difficult for journalism materials that you need to keep it up to date. We will take a close look at it. And I also am glad you brought to our attention this need for preservation. We will see if we can find some resources to help you.

Ms. HEANUE. Thank you very much.

Mr. DURBIN. Ms. DeLauro.

Ms. DELAURO. I just have one question, and I don't know if it is fair to ask you or if I should ask Ms. Albright, because I am new to this committee and new to the world of agriculture.

Can we get the listing of who utilizes the Library? What institutions, groups, individuals and so forth? How well used it is?

Ms. HEANUE. Let me see if I can find that out. I would be mighty surprised if the Library wouldn't have such information.

Ms. DELAURO. That would be helpful.

Ms. HEANUE. Let me see if I can find that out and then provide it for you.

Ms. DELAURO. Thank you very much.

Mr. DURBIN. Thank you for joining us.

Ms. HEANUE. Thank you.

[The information follows:]

AMERICAN LIBRARY ASSOCIATION
WASHINGTON OFFICE

110 MARYLAND AVENUE N.E. WASHINGTON, DC 20002 U.S.A.
202-547-4440 FAX 202-547-7363

April 19, 1993

The Honorable Richard J. Durbin
Chairman
Subcommittee on Rural Development,
Agriculture and Related Agencies
Committee on Appropriations
U. S. House of Representatives
2362 Rayburn House Office Building
Washington, D. C. 20515-6016

Dear Mr. Durbin:

When I testified before your Subcommittee on April 1 concerning the fiscal year 1994 budget request of the National Agricultural Library, Representative DeLauro asked me if I could find out who utilizes the Library. Staff of the National Agricultural Library provided me with the enclosed summary of the variety of users served by the Library. I would like to provide this information for the hearing record on fiscal year 1994 agricultural appropriations.

I am sending this same information to Representative DeLauro.

Thank you again for the opportunity to testify before the Subcommittee.

Sincerely,

Anne Heanue

Anne A. Heanue
Associate Director
ALA Washington Office

AAH/pm

Enclosure

THE NATIONAL AGRICULTURAL LIBRARY

The National Agricultural Library services a variety of users, including:

- Researchers
- Extension agents
- Farmers
- Government officials
- USDA employees
- Educators
- Students
- Congress
- Agribusiness
- Consumers
- General public
- Land-grant university libraries, special libraries, and other libraries and information centers worldwide

NAL USAGE INDICATORS

	1992 actual	1993 est.
Document Delivery Requests filled by NAL	117,680	123,564
Regional document delivery to USDA	65,433	68,705
Interlibrary borrowing for USDA	20,169	21,177
Reference requests	49,251	51,714
Online and CD-ROM database searches	16,734	17,571
Current Awareness literature searches	93,152	93,152

Demand for services and products continues to intensify. Document delivery requests have increased 27 percent over the past 4 years; reference and related requests are up 125 percent over the same period.

EXAMPLES OF ASSISTANCE PROVIDED TO USERS BY NAL

The Library can help:

- A potential aquaculturist start a catfish farm in Mississippi.
- A private company identify suppliers of hatchery equipment
- A farmer thinking of converting from chemical-intensive crop production to alternate modes of insect and weed control or plant fertilization.
- A new farmer who wants to try an organic method of farming.
- A farmer design a market-oriented diversification program of production.
- An extension agent who needs the latest information on reduced tillage methods or potential new crops.
- School teachers teaching nutrition.
- Food service managers who need training materials on sanitation and food safety.
- A florist trying to determine trends in the floriculture industry over the past 10 years.
- An extension agent establishing an afternoon program for latchkey children.
- A gerontologist seeking research on aging.
- A veterinarian needing information on safely transporting animals.

Statement
by

Elaine M. Albright
Chair, Legislative and Government Committee
United States Agricultural Information Network (USAIN)

before

The Agriculture, Rural Development, Food and Drug Administration
and Related Agencies Subcommittee on Appropriations

April 1, 1993

Mr. Chairman and committee members, I am Elaine Albright, Dean of Cultural Affairs and Libraries at the University of Maine. I also serve as the Chair of the Legislative and Government Committee of the United States Agricultural Information Network (USAIN). I am requesting a budget increase of $4 million for the National Agricultural Library (NAL) in Fiscal Year 1994.

The United States Agricultural Information Network is a relatively new organization established in 1988. USAIN provides a forum for agricultural issues, takes a leadership role in formulating national policy related to agricultural information and makes recommendations to the National Agricultural Library. As our name implies, we are a "network" of agricultural information specialists for corporation libraries, state land-grant universities and state and federal government agencies. We work closely with the National Agricultural Library to share, preserve, and improve access to agricultural information throughout the nation.

The National Agricultural Library has experienced a static and therefore decreasing budget in the last few years. With rising costs of books, journals, programs and services, this static budget means NAL is falling well behind in its ability to support research and development by agricultural researchers in this country. The cost of library materials, especially journals, has increased by an average of 15% per year. Though NAL's book and journal materials budget has allowed for some inflation moneys over the years, the library has only been able to remain static and, in some years, has even had to reallocate its resources to remain within its allocated budget. Since it costs 15% to remain static, I am requesting your support of a budget increase that recognizes this high inflation and that also includes a sum to reinstate canceled journal subscriptions and allow purchase of NEW information. NAL must not only maintain its collection, but also grow as the information resources available continue to multiply. If our nation of researchers cannot find out what is happening every day, we will lose our edge as the world leaders in agricultural development.

The National Agricultural Library has pilot tested the conversion of a few of its unique and valuable of materials into electronic format to make them more readily accessible to land-grant universities and researchers around the country and the world. NAL, like other national libraries, has provided leadership to convert information on paper to digital formats thereby allowing remote access and fast document delivery to anyone, no matter what their location or resource base. NAL's leadership in this highly sophisticated and critical area is being jeopardized by insufficient budget for personnel and state-of-the-art computer equipment. USAIN asks your financial support for these projects by making them a strong 1994 budgetary priority.

Another important concern to NAL and agricultural researchers is the preservation of the world's best agricultural collection. NAL's existing collection, which often contains the only copy of information in the world, is fast deteriorating due to the environmental conditions and the chemical composition of the paper these materials were printed on. While the Library of Congress and National Library of Medicine have well funded preservation programs, the National Agricultural Library has no preservation budget and cannot begin to address this problem. It is not much to ask that $1 million be set aside to begin the preservation of the enormous investment already made to build the present NAL collection.

The last initiative I will address is NAL's library networking program. In recognition that neither the Library of Congress, National Library of Medicine, nor the National Agricultural Library will be able to respond to ALL the information needs of researchers, NAL has again provided leadership for land-grant libraries to participate in programs that share local resources with researchers world-wide. Most research libraries, also faced with static or decreasing budgets, have become more provincial in defining their service constituencies at a time when sharing resources may be the only logical alternative. More than ever before, it is imperative the NAL expand its networking efforts to guarantee the use of all the nations' resources for the agricultural community.

Thank you for your attention and responsiveness to USAIN's request for an increase in the National Agricultural Library's 1994 budget.

ORPHAN DRUG PROGRAM

WITNESS

ABBEY S. MEYERS, NATIONAL ORGANIZATION FOR RARE DISORDERS, INC.

Mr. DURBIN. With the National Organization for Rare Disorders, Abbey Meyers. I see your organization is based in Connecticut.

Ms. MEYERS. Yes, it is.

Mr. DURBIN. Thank you for joining us today.

Ms. MEYERS. Not far from New Haven, in fact.

Mr. DURBIN. We will make your entire statement part of the record.

Ms. MEYERS. Yes. Thank you. I am here to speak to you about the orphan drug grant program which was frozen last year at $12 million, and it is a vitally important program.

My written testimony will show you that starting—the funds were started in 1983 at a half million dollars and in all of these years, 10 years now, it is only up to $12 million. The FDA cuts off $3 million out of that total for their administrative costs, and so only $9 million goes for the research grants.

But I don't know whether you saw the movie Lorenzo's Oil. That has been very popular lately. But there is a drug that would not be developed if it were not for this money. It is a drug for Adrenoleukodystrophy, a deadly disease which kills children. And there are six drugs that have been approved and are on the market, and they are listed in the—in my written testimony.

It might seem fascinating to you that one of those drugs is a drug for childhood lead poisoning. And you probably didn't know that it was untreatable until this drug was manufactured, and it would not have been manufactured without the money that was appropriated by this committee.

So these monies are vitally important. They mean life and death to many, many people. And we are talking about 5,000 orphan diseases that fall within this category and can be funded by this money, and there is just not enough money.

This is one of the extremely important programs that the Federal Government funds because these drugs do not have commercial interests. The companies are not looking into these drugs. Can you imagine that there would be nothing for lead poisoning if it were not for this money and how little it took to get it on the market?

So we are asking for an appropriation of $15 million this year, just an increase of $3 million, so that the FDA can use that $3 million for their administrative costs and let $12 million be used for the research grants to academic researchers and small companies.

Now, I also want to say something besides the vital importance of this program and how many lives depend on it to address what the people brought up a few minutes before about health foods. This is really quite disturbing to us because the FDA does not regulate the manufacture of vitamins, minerals and health food. They don't have enough people there to do it.

And it is not just l-tryptophan. A few years ago 40 babies died of vitamin E because the manufacturer made an intravenous form of vitamin E and felt it was a vitamin and since the FDA doesn't

monitor that, why bother approximating doing them. It is a very serious problem.

We need the FDA to monitor these types of things. Nothing is harmless. People die of two aspirins. People die of overdoses of vitamins.

The worst problem is that there is no regulation. These people are being ripped off. You don't know when you buy a capsule of vitamin B-12 how much it has-maybe too much or little—and whether it dissolves in your stomach.

Out of curiosity, because this is a health food, that is baby who died of a neuromuscular disease—we sent samples down to Duke University of carnitene, and we had it tested, and we found more than half of those samples did not dissolve in the stomach.

Now, State medicaid systems were saying they didn't want to pay for the prescription drug, and they were telling people to go to the health food store and buy it over the counter. But the prescription drug was regulated. You knew if you bought a hundred milligrams that is what you got. And the over-the-counter product was either overdosed, underdosed, or it doesn't dissolve in your stomach. And some of them, sir, had absolutely no carnitene at all.

So this industry is ripping off the public. They must be regulated. And please give the resource to the FDA to finally regulate it. Thank you.

Mr. DURBIN. Thank you for coming. We are going to try to help you.

I know it is probably a labor of love for you to come down here and try to persuade people you have never seen—with the exception of Mrs. DeLauro—but I am going to remember your testimony when we sit down and do markup, we will do our very best to help you.

Ms. MEYERS. Thank you.

Mr. DURBIN. Ms. DeLauro.

Ms. DELAURO. I just wanted to welcome Abbey Meyers to the committee. This is a woman, as you can see, who has great dedication to this whole issue and gives of her time and her life in the pursuit of this effort, and I just wanted to acknowledge that here.

Let me ask you a couple of questions, Abbey. Do you know why the FDA takes 25 percent of the money? Is that just off the top in terms of administrative expenses?

Ms. MEYERS. During the last 12 years, FDA has been squeezed dry. I mean, when—in 1980, when I first became involved with the orphan drug problems, the FDA had something like 8,000 or 9,000 employees, and by 1987 or 1988 they were down to 6,000 or 7,000. So even though this is an agency that has a big regulatory job, has a lot of work to do, their staff was cut back, their resources were cut back.

I urge you to go up and see the FDA building in Rockville because you won't believe the working conditions up there. There is one building that is a chicken coop that people work in. And so, without these resources, they had to make choices, and some of those choices, unfortunately, are things like not regulating the manufacture of vitamins and minerals and all these other problems. It has been destitute these last few years.

You have got to do something about FDA's overall funding. It is not just that they are protecting the public. They are saving the lives of sick people.

Ms. DELAURO. Tell me is there is any other Federal program that provides funding for research into orphan drugs. Does NIH do anything?

Ms. MEYERS. NIH funds research on diseases but they don't like to fund clinical trials. They fund the basic research. Through NIH research we usually find out what is wrong, what is causing the disease, but when it comes to testing a therapy, they really don't like to get involved unless they are instructed to do so.

For instance, cancer drugs are tested by NCI, but you can't get any kind of interest up there on testing something like Lorenzo's oil.

Ms. DELAURO. So this is the only program which supports it?

Ms. MEYERS. That is specifically for testing therapies on rare diseases.

Ms. DELAURO. I just want to be accurate. You talked about requesting $15 million, with $3 million going to the FDA and $12 million to carry out your program.

Ms. MEYERS. Twelve million dollars directly to grants so that out of that $12 million, it can be given directly to the scientists.

Ms. DELAURO. Thank you for being here.

It is wonderful to listen to you.

Thank you.

Ms. MEYERS. Thank you.

Mr. DURBIN. Ms. Meyers, before you leave, there are two things I would like to mention to you. We are doing our best to help the FDA but this subcommittee has increased the appropriation for that agency by 63 percent since 1988. But you and I both know, they have a big job to do and we keep giving them even more to do, so we are going to try to do our very best for them again this year.

And before you leave, you acknowledged in your statement, and I want to acknowledge that this orphan drug program was started by this subcommittee, by the gentleman who sits to my right, Mr. Whitten, even before it was authorized.

Ms. MEYERS. That is right.

Mr. DURBIN. It was unauthorized, which the self-anointed pork busters would have been out screaming about. And thank God, we ignored their predecessors and put money into a program which I believe has saved lives.

Ms. MEYERS. It sure has.

Mr. DURBIN. I am glad you came today.

Ms. MEYERS. Please give Mr. Whitten my best regards, I hope he is feeling well.

Mr. DURBIN. We will. Thank you very much.

[The prepared statement follows:]

President:
Jess Thoene M.D.

Executive Director:
Abbey S. Meyers

Member Organizations:
Acoustic Neuroma Association
Alliance of Genetic Support Groups
Alpha-1 Antitrypsin Deficiency National Association
American Brain Tumor Association
American Carpal Tunnel Syndrome Association
American Narcolepsy Association, Inc.
American Porphyria Foundation
American Society of Adults with Pseudo Obstruction, Inc. (ASAP)
American Syringomyelia Alliance Project
Aplastic Anemia Foundation of America
Association for Glycogen Storage Disease
Batten Disease Support & Research Association
Benign Essential Blepharospasm Research Foundation, Inc.
Charcot-Marie-Tooth Association
Chromosome 18 Registry and Research Society
Cornelia de Lange Syndrome Foundation, Inc.
Cystinosis Foundation, Inc.
Direct Link for the Disabled, Inc.
Dysautonomia Foundation, Inc.
Dystonia Medical Research Foundation
Dystrophic Epidermolysis Bullosa Research Assoc. (D.E.B.R.A.)
Ehlers-Danlos National Foundation
Epilepsy Foundation of America
Families of Spinal Muscular Atrophy
Fanconi Anemia Research Fund, Inc.
Foundation for Ichthyosis & Related Skin Types (F.I.R.S.T.)
Guillain-Barré Syndrome Foundation International
Hemochromatosis Foundation, Inc.
Hereditary Disease Foundation
Histiocytosis Association of America
Huntington's Disease Society of America, Inc.
Immune Deficiency Foundation
International Fibrodysplasia Ossificans Progressiva (FOP)
International Joseph Diseases Foundation, Inc.
International Rett Syndrome Association
Interstitial Cystitis Association of America, Inc.
Lowe's Syndrome Association
Malignant Hyperthermia Association of the United States
Myeloproliferative Disease Center Nanocyte Network, Inc.
National Adrenal Diseases Foundation
National Alopecia Areata Foundation
National Association for Sickle Cell Disease, Inc.
National Ataxia Foundation
National Chronic Fatigue Syndrome Association, Inc.
National Foundation for Ectodermal Dysplasias
National Fragile X Foundation
National Gaucher Foundation
National Leigh's Disease Foundation
National Marfan Foundation
National Mucopolysaccharidosis Society, Inc.
National Multiple Sclerosis Society
National Neurofibromatosis Foundation
National PKU News
National Retinitis Pigmentosa Foundation, Inc.
National Sjögren's Syndrome Assoc.
National Spasmodic Torticollis Assoc. (NSTA)
National Tay-Sachs & Allied Diseases Association, Inc.
National Tuberous Sclerosis Association, Inc.
National Urea Cycle Disorders Fdtn.
National Vitiligo Foundation, Inc.
Neurofibromatosis, Inc.
Obsessive Compulsive Foundation
Osteogenesis Imperfecta Foundation
Ostosis & Hyperostosis Foundation
Paget's Disease Foundation, Inc.
Parents of Galactosemic Children
Parkinson's Disease Foundation, Inc.
PKR Foundation
Prader-Willi Syndrome Association
Reflex Sympathetic Dystrophy Syndrome Association
Scleroderma Federation, Inc.
Scleroderma Info Exchange, Inc.
Sjögren's Syndrome Foundation, Inc.
The A.L.S. Association
The EAR Foundation
The Myasthenia Gravis Foundation
Tourette Syndrome Association
Trigeminal Neuralgia Association
United Leukodystrophy Foundation, Inc.
United Parkinson Foundation
United Patients Association for Pulmonary Hypertension, Inc.
Vestibular Disorders Association
Wegener's Granulomatosis Support Group
Williams Syndrome Association
Wilson's Disease Association

National Organization for Rare Disorders, Inc.
NORD • 100 Rt. 37, P.O. Box 8923 • New Fairfield, CT 06812-1783 • (203) 746-6518

out of the darkness, into the light

TESTIMONY OF

ABBEY S. MEYERS, EXECUTIVE DIRECTOR

NATIONAL ORGANIZATION FOR RARE DISORDERS (NORD)

TO

RICHARD J. DURBIN, CHAIRMAN

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,

FOOD AND DRUG ADMINISTRATION, AND

RELATED AGENCIES

RE: FDA ORPHAN DRUG GRANT PROGRAM

APRIL 1, 1993

Associate Members

Accord Syndrome Newsletter
Alabama Society for Sleep Disorders
A.L.S. Association Greater Philadelphia Chapter
American Behcet's Association, Inc.
American Self-Help Clearinghouse/NJ
ARC of Ohio
Association for Children with Russell-Silver Syndrome, Inc.
Center for Research in Sleep Disorders
Charcot-Marie-Tooth International
Children's Leukemia Foundation fulfillment
Christine Lazar Foundation for Juvenile Laryngeal Papillomatosis
Chronic Granulomatous Disease Association
Congenital Adrenal Hyperplasia Assoc., Inc. (CAHSA)
Devereux Foundation
Footsteps Institute
Foundation for Nager & Miller Syndromes
Freeman-Sheldon Parent Support Group
Help Hospitalized Children's Fund
Klippel-Trenaunay Support Group
Lethbridge Society for Rare Disorders/Canada
Lyme Borreliosis Foundation
National Association For Pseudoxanthoma Elasticum
National Coalition for Research in Neurological & Communicative Disorders
National Cushings Association
National Self-Help Clearinghouse (Israel)
North American Pediatric Pseudo-Obstruction Society
Organic Acidemia Association, Inc.
Parent to Parent of GA, Inc.
Parent to Parents of New Zealand
Port Alberni Association for Children with Developmental Disabilities
Research Trust for Metabolic Diseases in Children/England
Rocky Mountain Resource & Training Institute
Shy-Drager Syndrome Support Group
Sickle Cell Association of the Texas Gulf Coast
Soto's Syndrome Support Group
Sturge-Weber Foundation
Tourette Syndrome Assoc. of MD
Tourette Syndrome Assoc. of Nova Scotia
Tourette Syndrome Assoc. of OH
Treacher Collins Foundation
Tuberous Sclerosis Assoc. of IL
Vaincre les Maladies Lysosomales/France

* Associations are joining continuously. For newest listing please contact the NORD office.

Dedicated to Helping People with Orphan Diseases

3/93

Mr. Chairman, members of the committee, on behalf of the National Organization for Rare Disorders (NORD), which represents an estimated twenty million Americans with rare "orphan diseases," we want to thank you for this committee's consistent support of the FDA's Orphan Drug Program. This year marks the tenth anniversary of the Orphan Drug Act, but in 1982 (one year before enactment) Mr. Whitten appropriated funds to the FDA to launch this lifesaving biomedical research effort.

We particularly want to welcome Congressman Durbin as the new Chairman. We pledge our support and assistance in the difficult work that lays ahead, especially the enhancement of FDA's abilities to enforce the law and speed new drugs to market.

To date, the FDA's Orphan Drug Grant Program has funded more than 190 grants. Six of those grants are responsible for new orphan drugs and devices that are currently on the market, and dozens more will doubtlessly be approved in the next few years.

FDA's orphan drug grants are primarily awarded to academic scientists studying new treatments for rare diseases, who cannot find financial support elsewhere. The treatments are generally believed to have little commercial value, and in the absence of potential profitability, pharmaceutical and device companies are often unwilling to invest in research and development (R&D). Orphan drug grants also provide R&D seed money to small start-up companies that are willing to adopt drugs that will have very limited markets. Interestingly, some of these new tiny pharmaceutical and biotechnology companies have evolved out of the incentives and grants afforded under the Orphan Drug Act.

Mr. Chairman, you or your staff people may have seen the recent popular movie, "Lorenzo's Oil." Nominated for several academy awards, the story illustrates how a family would not accept the hopeless course of their dying son's disease, Adrenoleukodystrophy. Through their efforts, Lorenzo's Oil was discovered to treat this fatal disease.

What the movie did not explain is that Lorenzo'o Oil is an orphan drug, and there would be no research on the safety and effectiveness of this drug without the funding that this committee has appropriated. Virtually all of the clinical trials have been funded by FDA's Orphan Drug Grant Program to Dr. Hugo Moser at the John's Hopkins Kennedy Institute. Every child in the United States with Adrenoleukodystrophy gets the drug through Dr. Moser's IND. Without your appropriation each year, all of these children might have already died and the movie, Lorenzo's Oil, would not have been made.

The problem is that there are many other Lorenzo's Oils out there, but not enough money to fund other lifesaving grants. For the past two years this committee appropriated the same amount of funds, and since over 50% of grant funding goes to researchers already conducting multi-year studies, there is very little left to fund <u>new</u> projects. In FY92 $7 million of a $9.145 million appropriation went for continuation grants; in FY93 $6.5 million of $9.145 will go for continuations.

Out of the total $12 million appropriated last year, only $9.145 million was actually spent on grants. FDA uses the remainder for its administrative costs. If you appropriate additional funds earmarked for grants, each additional million dollars would fund six to eight small grants or four larger grants. Each successful clinical trial could help or save hundreds to thousands of lives.

Mr. Chairman, there are approximately 5,000 orphan diseases. Surely not all of them have therapeutic breakthroughs waiting to be developed, but $9.145 million is hardly enough to even approach the problem. We believe that at least $15 million should be appropriated for FY94 and all of it should be earmarked for grants, not for FDA's administrative expenses.

Is $15 million too much to save 250 children with Adrenoleukodystrophy such as Lorenzo? Or 10,000 with Sickle Cell Anemia? Or 2,000 with Wilson's Disease? While these diseases are always fatal, and FDA's Orphan Drug Grant Program is supporting clinical trials on promising new therapies, there are also many other equally hopeless diseases that - - - due to lack of funding - - - are not being investigated.

We also feel that this committee has a formidable job in correcting the injustices of inadequate FDA funding during the past decade. Although there were many warnings that manpower shortages were critical, and facilities were abominable, adequate funding for the agency has been unavailable, FDA has suffered, and most importantly consumers of foods and drugs have been the losers. The user fees which we all hope will alleviate the manpower problems that have plagued the agency, are a good idea. However, we are convinced that user fees for orphan drug developers should be waived because the lion's share of orphan drug development is done by very small companies. The start-up companies cannot afford user fees (which must be paid in advance), and many small companies do not sell enough of their drugs to cover the user fees.

For example, a few weeks ago I spoke to a small manufacturer who ordinarily manufactures vitamins. However, they have adopted seven orphan drugs to treat rare types of kidney stones and three of them are approved for marketing. However, the combined sales of all three drugs is less than $1 million per year. The manufacturer simply cannot afford user fees under the current formula.

Moreover, most small orphan drug manufacturers will have to raise their prices to cover the costs of the user fees. So it will be the patients, who can least afford it, who will have to pay higher prices. Many of our patients have chronic illnesses that make them uninsurable. Higher prices spread over tiny numbers of people will make some of these drugs unaffordable to many families.

Mr. Chairman, we know that to the new administration people come first. We say, it's about time! The people who need the FDA have been victims of a horrendous health care system, and bureaucracies that have been crippled by funding cut-backs and inadequate regulatory authority. We are asking that this committee empower FDA with the dollars it needs to do its job and protect healthy Americans while nurturing and aiding the ill. FDA cannot get lifesaving drugs to us faster if they don't have sufficient manpower, they cannot approve orphan drugs unless the research is performed under these grants, and they cannot inspect food and drugs unless they have trained and knowledgeable inspectors.

The fact is "deregulation" has been a disaster when you measure the effect on pharmaceutical development and marketing. It is time for FDA to monitor, to inspect and to regulate the foods and medicines Americans need for their survival, and it is time for this nation to live up to its commitment that life is sacred, even if that life is a small boy named Lorenzo who has a very rare disease.

For your information, following is a list of the six orphan products that were developed through FDA's Orphan Drug Grant funding, and are currently on the market:

Drug/Device	Disease
Adagen	Severe Combined Immune Deficiency (The "Bubble Boy Disease")
Chemet	Childhood Lead Poisoning
Histrelin	Central Precocious Puberty
Nafarelin Acetate	Central Precocious Puberty
Baclofen	Severe Spasticity (Combination Drug/Device)
Pulmonary Angioscope	Pulmonary Hypertension (Device)

In total, 87 orphan drugs have been approved for marketing since 1983, and it is significant that five of them plus one device were developed with the funds you appropriated.

We also want to remind you that this year the Japanese government is enacting an Orphan Drug Act which includes a generous grant program for academic researchers and small manufacturers. We believe it is incumbent upon the United States government to maintain the lead in orphan drug development, and illustrate to the rest of the world that our compassionate society is proud of its commitment to this research program. Sadly, we do not look very good if after ten years we have committed only $12 million annually to a program that touches the lives of twenty million Americans, and provides hope to the desperately ill. We know President Clinton and a compassionate Congress will not let us down, but our fate is literally in your hands.

Thank you.

WIC PROGRAM

WITNESSES

JUDY FORD WILSON, VICE PRESIDENT, NATIONAL ASSOCIATION OF WIC DIRECTORS

DOUGLAS A. GREENAWAY, NATIONAL ASSOCIATION OF WIC DIRECTORS

Mr. DURBIN. Judy Ford Wilson and Douglas Greenaway with the National Association of WIC Directors.

Ms. JUDY WILSON. Good evening.

Mr. DURBIN. Glad to have you here.

Ms. JUDY WILSON. Mr. Chairman, and Members of the committee, I am Judy Wilson, Vice President of the National Association of WIC Directors. I am really pleased to have the opportunity this evening, although it rather late, to present testimony on the 1994 appropriations for the Special Supplemental Food Program for women, infants and children.

I commend you, Mr. Chairman, and the committee for your continuing support and your interest in the health and welfare of women, infants and children in our country.

The National Association of WIC Directors is a nonprofit organization of State and local WIC program staff who are dedicated to maximizing the WIC's program resources through effective management practices and to making WIC more responsive to the nutrition and health needs of women, infants and children.

Currently, the program is estimated to serve approximately 5.8 million people per month. It provides supplement foods and nutrition education. Breast-feeding promotion information and improved access to health care delivery systems. The WIC program successes have contributed significantly to its popularity, as you know.

Numerous substitutes, both public and private, have demonstrated that WIC is a highly-successful program that has achieved significant positive health consequences in a cost-effective manner. A USDA study showed that for each dollar spent, on pregnant women in WIC saves $1.77 and $3.13 in medicaid costs for mothers and infants in the first 60 days after birth.

Pregnant women on medicaid who receive assistance through WIC are less likely to have premature births and low birth-weight babies. In spite of the nearly threefold increase in WIC funding for the program over the last 10 years, and the almost one and a half–150 percent increase of number of participants served, WIC still falls short of reaching all the mothers, infants and children who were at nutritional risk and eligible for the program.

I urge every Member of this committee to commit to appropriating sufficient fiscal year 1994 funding to keep WIC on target for full funding in 1996. As Congress considers full funding for the WIC program, I urge you to maintain the programs's focus on nutrition and maintain the program's reputation for providing quality service. And maintain the program's targeting and tailoring capability and exempt WIC from all budget balancing, legislation and agreements.

In conclusion, Mr. Chairman, the National Association of WIC Directors look forward to working with you and the Members of

the subcommittee and the full committee as you consider the 1994 appropriations for the WIC program.

I would happy to respond to any questions you may have.

Mr. DURBIN. Mr. Greenaway, do you have any comments?

Mr. GREENAWAY. No, sir.

Mr. DURBIN. Now let me say this program is one of our favorites in the subcommittee. We really believe there are wonderful people working in it. It is doing great things across America, which will leave a very rich legacy to us with healthy kids, off to a good start in life.

We are going to work with President Clinton who has made a personal commitment to the program as well. I don't think that we will ever reach 100 percent of funding, that may be physically impossible. But we will do our best to go after all eligible folks to let them know this program is veil for them.

I would like to ask you one question that relates to the fact that some WIC programs make an effort to educate pregnant women about the dangers of smoking during pregnancy and the dangers of smoking around small children after they are born. Can you tell me whether or not the programs that you are involved in have done this?

Ms. JUDY WILSON. Well, I am the WIC Director for the District of Columbia. And as you know, smoking, of course, women who smoke during pregnancy have twice as many low birth-weight babies as women who do not. And in the District, as well as in other places, in the mid-Atlantic regions and other parts of the country, I think you will find WIC programs making a sincere effort to get women to stop smoking.

However, the WIC program has limited capability in terms of really implementing smoking cessation programs. It is really beyond most of our capability. However, because WIC serves as an adjunct to ongoing health care, we are able to connect women to resources where they can go and get the kind of intervention programs that they really need in order to support their efforts to stop smoking.

Mr. DURBIN. I don't want to minimize the danger and seriousness of alcohol consumption and drug use during pregnancy which are equally as dangerous as smoking, but I think we have found that the WIC program has been very successful because of the personal connection between the people working in the program and the recipients. There is a trust relationship that comes out of it. And if I can encourage you through your organization to try and send this message out, across the Nation about the need to educate mothers about the dangers of smoking, this subcommittee chairman will appreciate that very, very much.

Ms. JUDY WILSON. Thank you, and you have our assurance that we will continue to do that.

Mr. DURBIN. Ms. DeLauro.

Ms. DELAURO. Did you want to say something?

Mr. GREENAWAY. I wanted to add one comment, if I may, and refer you in the testimony to the section on Title V block grants, with respect to the maternal child health programs. As Judy said, a critical component of the WIC program is that we have the reputation as serving as a gateway to health and it is the ability of the

program to refer our participants to maternal child health clinics and that block grant program is also in need of appropriations.

Of course, it doesn't fall within the purview of this committee but it is an important consideration for U.S. members to review.

Mr. DURBIN. Thank you.

Ms. DeLauro.

Ms. DELAURO. I just would like to address my comments to those of the Chairman. This is a program that works. Let's continue to make it work.

I do have a question about outreach and what kind of tools you have to do outreach, to be able to locate women for good prenatal care, and afterward, and what are some of the constraints on that outreach, at the moment?

Ms. JUDY WILSON. Well, of course, many States have developed and implemented very innovative outreach programs. But getting women who most need prenatal care and WIC services for both of these services early in pregnancy, I think, continues to be one of the greatest challenges that are confronting us.

One of the things that we have done here in the District is try to link up very closely with others, community groups, as well as public organizations, who are really doing the grassroots community-level type of work. And that appears to be working across the country and here in the District.

We are trying to take the WIC program to the people. Using mobile units, using extended service hours, we have Saturday hours at 5 out of 15 sites. We have evening hours out in six sites, and we have early morning hours to make the program accessible, not only to nonworking women but there are many low-income very needy women who are in clerical position, also, who really can't afford to take time off from work to come in to get WIC and other services they need, and WIC programs are responding.

The regional office of the USDA provided discretionary funding to the district this year to look at service accessibility across the country, and I was very pleased to learn that not only are outreach programs being implemented, but people are expanding services to nontraditional hours and to nontraditional sites in order to reach out to the community.

Obviously, more needs to be done because we still have hundreds of thousands of women who are getting inadequate or no prenatal care. Unfortunately, a lot of those women are in the District. We are continuing to look for ways.

The Secretary of Agriculture has indicated to the association his commitment to working with us to look at national outreach campaigns, and we are very excited about that. So we are hoping that new and better ways will be developed to reach this hard-core group of people.

Ms. DELAURO. I am encouraged, particularly looking at nontraditional hours of the mobile units. I represent and am from the City of New Haven, which is one of the 18 towns that I represent. New Haven, for a city its size, has one of the highest rates of infant mortality and low birth-weight babies, leading the Nation in a city of its size and that is located in the eaves, if you will, of two of the leading hospitals in the world, St. Raphael's Hospital and Yale University.

Yet, in some of our communities, those numbers rival Third World countries. So having to look at that grassroots efforts the mobile units, and going from school to school, and place to place, is critical, and the funding for that, Mr. Chairman, of being able to do that to reach these women is critical.

I would also be interested if you keep track of these—if there is any sibling effect of what you do. You do have the mother in for prenatal care and birth and immunization, and so forth, but are you seeing anything that is resulting in sibling effect, of bringing in other children for health care treatment that they wouldn't ordinarily get by emergency room or anything else? Have you looked at that issue?

Ms. JUDY WILSON. I am not aware of any specific studies that have really linked that particular finding, but if I can share some anecdotal experiences here. I think WIC not only affects the siblings, but it affects the lifelong eating patterns of not just the mothers and the children but of the whole family, because WIC teaches women how to eat themselves, how to feed their babies, how to feed their young children and that nutrition education message is translatable, not to just her immediate family but to others in the household, and many of these are living with other people who benefit as well from this message.

Of course, we find that when women come into the program, the children are eating, you know, Sugar Frosted Flakes, and I don't mean to pick on Kelloggs and other kinds of products that are less nutritious, and once they have the advantage of a nutrition education in WIC, we find that later studies will show that the children are really enjoying the cereals that aren't sugar coated. And I think this is a message that will help them in the long term, and not just them, but also their families.

Ms. DELAURO. Thank you very much.

Thank you, Mr. Chairman.

Mr. DURBIN. Mr. Skeen.

Mr. SKEEN. I have no questions.

Mr. DURBIN. This is a real setback to hear about Sugar Frosted Flakes.

Ms. JUDY WILSON. I like them, too.

Mr. DURBIN. We certainly welcome your testimony and thank you for joining us.

We are going to be working on this program and trying to help you.

Ms. JUDY WILSON. Thank you very much.

[The prepared statement follows:]

NATIONAL ASSOCIATION OF WIC DIRECTORS

NAWD

Statement of Judy F. Wilson
Vice President

National Association of WIC Directors

before the
Subcommittee on Agriculture, Rural Development, Food and Drug Administration and Related Agencies of the House of Representatives Committee on Appropriations

Thursday, April 1, 1993
5:30 PM, 2362 Rayburn House Office Building

Mr. Chairman and Members of the Committee:

I am Judy Wilson, Vice President of the National Association of WIC Directors (NAWD). I am also the State WIC Director for the District of Columbia. I am pleased to have the opportunity today to present testimony on fiscal year 1994 appropriations for the Special Supplemental Food Program for Women, Infants and Children, known as WIC, under the administrative jurisdiction of the Food and Nutrition Service (FNS) of the United States Department of Agriculture (USDA).

I commend you, Mr. Chairman and the Committee for your continuing support for the WIC Program and your intense interest in the health and welfare of our nation's women, infants and children.

NAWD Experience and Organizational Goals

Founded in 1983, and headquartered in Washington, DC, the National Association of WIC Directors (NAWD) is a non-profit voluntary organization of state and local WIC Program staff directors and nutrition coordinators). NAWD has a unique perspective on the operation of the WIC Program. Our members are dedicated to maximizing WIC Program resources through effective management practices and to making the WIC Program more responsive to the nutrition and health needs of women, infants (defined by WIC as 12 months of age and under) and children (defined by WIC as ages 1 to 5 years).

Among NAWD's goals are: the promotion of improved health, well-being and nutrition status for women, infants and children; effective national resource networking to facilitate the communication of ideas, materials and procedures to individuals working in the WIC community; the promotion of good management practices; peer assistance to WIC Program directors at the state

and local level; and to act as a resource to government on issues relevant to the WIC Program and to the health and nutrition of women, infants and children.

WIC Program Background

In fiscal year 1992, the WIC Program served approximately 5.3 million participants per month. Currently, the Program is estimated to serve approximately 5.8 million participants per month in the 50 Geographic States, the District of Columbia, Virgin Islands, Puerto Rico, Guam and in 32 Native American States. By the close of fiscal year 1993 (assuming passage of the President's supplemental appropriation request) the Program is estimated to serve approximately 6 million perticipants per month. It reaches out to over one-third of the nation's infants.

Eligibility fcr WIC benefits requires that WIC health professionals document potential participants' health or nutrition risk. Potential participants must demonstrate that their family income does not exceed 185% of the Federal poverty income guideline. Preference for service is generally given to pregnant women and infants with at risk nutrition or health conditions. A lower priority is assigned to children and postpartum mothers at risk of nutrition or health consequences.

Among nutritional risk problems which can qualify participants for eligibility are: abnormal weight gain during pregnancy; a history of high-risk pregnancies; growth problems in children and infants such as stunting, underweight, or obesity; anemia; or an inadequate dietary pattern.

Services are delivered through a variety of local social service agencies or health clinics which have access to health care providers. Today, there are over 8,200 clinics providing WIC services nation-wide.

WIC's Benefits

WIC provides eligible participants with supplemental foods, nutrition education, breast-feeding promotion information and improved access to the health care delivery systems.
Because the Program is a nutritionally based education program, local agencies offer WIC participants at least two nutrition education sessions, conducted on either an individual or group basis, within each six month certification period. Through these sessions, participants learn about their specific nutritional needs as well as the nutritional needs of their infants and children. Participants are taught how to shop for nutritious foods and how to prepare economical, well-balanced meals. They are also counseled on the importance of regular medical care, the advantages of breastfeeding infants and the dangers of drug and alcohol use during pregnancy.

The WIC Program also provides supplemental foods through monthly food packages which are tailored to meet the special dietary needs of the infants, children, pregnant, postpartum and breastfeeding women in the program. Foods in the packages are selected to provide protein, iron, calcium, and vitamins A and C. These nutrients have been selected as they have been found to be missing from the diets of many low-income women, infants and children. Among the authorized foods provided in the supplemental food packages are: iron-fortified infant formula, infant cereal, milk, eggs, cheese, iron-fortified breakfast cereal, Vitamin C-rich juice, beans and peanut butter.

WIC's Success Record

Recent evidence of the WIC Program's successes in improving pregnancy outcomes have contributed significantly to its popularity. WIC has generated enthusiastic supporters in the nation's corporate board rooms and vigorous bipartisan support in both houses of the Congress.

Numerous private and public sponsored studies of the WIC Program have demonstrated that WIC is a highly successful program that has achieved significant positive health consequences in a cost-effective manner.

According to a USDA study conducted in five states -- Florida, Minnesota, North Carolina, South Carolina and Texas -- and released late in 1990, showed each dollar spent on pregnant women in the WIC program saves from $1.77 to $3.13 in Medicaid costs for mothers and infants in the first sixty days after birth. A later study calculating the Medicaid savings used the full cost of an illness that started within 60 days after birth, regardless of length, revealed an even greater savings of between $1.92 and $4.21 for each prenatal dollar spent by WIC.

Still other studies have indicated that pregnant women on Medicaid who receive assistance through WIC are less likely to deliver premature or low birth weight babies. They are more likely to have healthier babies. These benefits result in enormous Medicaid savings and reduced federal and state health care spending.

In a May 1992 release of a General Accounting Office (GAO) report, GAO estimated that in 1990, the federal government spent $296 million on prenatal WIC benefits resulting in a savings of $853 million in health-related expenditures for WIC infants during their first year of life. On this initial investment, GAO estimated, the total savings in health and education related expenditures over a child's 18 years of life amounted to over $1 billion.

Another study published in the "Journal of The American Medical Association" (September, 1987) demonstrated the efficacy of WIC in significantly reducing the prevalence of anemia and in reducing

rates of height and weight abnormalities among children. While a study published in "The New England Journal of Medicine" (November, 1985) indicated a marked reduction in the levels of iron deficiency among children who had participated in the WIC Program.

Clearly, these studies and others suggest that failure to enroll all eligible participants in the WIC program actually costs the federal government far more money than is saved. The WIC Program is essential to ensuring that all our nation's children are physically, emotionally and developmentally ready for the challenges they will face as this nation moves to place itself in a more competitive position in the 21st century. The WIC Program is essential to meeting this goal. But WIC is not currently available to the majority of the nation's eligible one to five year old children.

Corporate America Commits to WIC

In testimony before the House Budget Committee last year, the Chief Executive Officers of Prudential Insurance Company of America, AT & T, Honeywell, Inc., BellSouth Corporation and Sky Chefs, Inc., were unanimous in their support of WIC full funding by 1996. As Sky Chefs, Inc., CEO William S. Woodside put it:

> "WIC is a prevention program that works extremely well. How can we justify failing to proceed expeditiously to extend WIC to all women and children who qualify for it? Children born today and in coming years will make up an increasingly large part of the workforce that will sustain our economy ... for much of the first half of the 21st century. Our neglect of these children not only damages them - it is counterproductive for our society."

Current funding levels allow roughly sixty percent of the nation's 8.7 million eligible women and children to participate in the WIC program. States have made every effort to maximize the use of WIC funds to increase participation levels. Further adjustments in food benefits could jeopardize the quality of services. Clearly, the need for full funding of the WIC program can be demonstrated.

Funding Issues

Inspite of a nearly three fold increase in funding for the program over the past ten years, and an almost 150% increase in the number of participants served, WIC still falls far short of reaching all of those mothers, infants and children who are at nutritional or health risk and eligible for the program.

Administration Request

Earlier this year, in his Economic Message to the Nation, President

Clinton proposed funding increases for WIC which reflects a fundamental commitment to the welfare of women, infants and children whose economic conditions may not provide the kind of nutrition needed for good health and normal growth. I commend the President for his commitment to phasing in full funding for the WIC Program by fiscal year 1996. I applaud him for recommending and this Committee for your support of the special supplemental appropriation of $75 million for this fiscal year. I also commend the President for his plan to provide subsequent increases in appropriations which would equate to approximately $318 million in FY 1994 to achieve a participation level of 6.4 million, $532 million in FY 1995 to achieve a participation level of 6.8 million, and $800 million in FY 1996 to achieve a participation level of 7.2 million at the outset of FY '96 and 7.5 million or full funding by the close of that fiscal year, - based upon Congressional Budget Office (CBO) and Office of Management and the Budget (OMB) projections. I urge every member of this Committee to commit to appropriating the fiscal year 1994 figure to keep WIC on target for full funding by FY 1996. I urge every member of Congress to support this proposal and help to place all of America's children on an even footing to face the future.

NAWD Full Funding Proposal

The National Association of WIC Directors recommended in 1991, that the Executive and the Congress adopt a five year plan to move the WIC Program incrementally toward funding "full participation" by fiscal year 1996. I am delighted that this Administration supports our view and has chosen to move forward aggressively with this message in its economic plan. As the Congress considers full funding for the WIC Program I urge you to: maintain the program's focus on nutrition; maintain the program's reputation for providing quality services by allowing states to incrementally add caseload thereby preventing undue burdens on WIC clinics, undue hardship for participants, avoiding service delays and potentially long waiting periods; maintain the Program's targeting and tailoring capabilities; and exempt WIC from all budget balancing legislation or agreements.

Clearly, the commitment you make to funding the WIC Program for the Fiscal Year 1994 - even at the levels NAWD, CBO and OMB have suggested - will not ensure that all of the nation's eligible women, infants and children are served, it will be a significant step in helping the program reach full funding by fiscal year 1996.

The House and Senate Budget Committees and the House have each recommended that the Congress fund the WIC Program at levels consistent with the President's goal of achieving full funding by fiscal year 1996. I encourage you to commit sufficient resources to keep WIC on target toward full funding in your deliberations regarding the FY 1992 appropriations.

Finally, NAWD proposes that at least $2 million of those funds which are available to the Secretary for the purpose of program evaluation (currently one half of one percent, not to exceed $5 million) be made available to states in the form of special projects grants. These grants would be available on a competitive basis to all states for special projects of up to two years in duration. Qualifying projects would have regional or national significance and be directed toward improving the services of the WIC Program. Under this proposal, states should have a minimum of two years to expend grant resources and complete approved projects.

Titile V-Supported Health Services for Women and Children

WIC is often characterized as the Gateway to Health for the Women, Infants and Children who participate in the Program. Essential to this Gateway is the ability to integrate Health Care services with WIC. The Title V Maternal and Child Health Services Block Grant provides funds to states to develop community-based, family-centered systems of preventive, primary and specialized care that coordinate and integrate public and private sector resources and programs. These community-based clinics are the backbone of the Health Care services system that WIC must integrate with. Title V direct service programs target the very families WIC serves - low income families; families with limited addess to care; and families with children with special health care needs.

The federal Maternal and Child Health Bureau of the Department of Health and Human Services estimates that in Fiscal Year 1991: Approximately 850,000 pregnant women received Title V-supported prenatal care, approximately 4.5 children and adolescents received Title-V supported preventive or primary care and over half a million children and families received specialty care and support services through Title-V Children with Special Health Care Needs Programs. These extimates of nearly 6 million women, infants and children served clearly dramatize the signifcant increase since FY 1987 when approximately 3 million were served.

States responding to a survey of MCH needs conducted by the Association of Maternal and Child Health Programs indicated that: 94% of 51 MCH programs were experiencing increased demand for prenatal and/or pediatric care; the same percentage reported increased demand for pediatric services. Caseload increase ranging from 5% to 7% and three to four week waits for appointments in some areas were also reported. The number of private physicians accepting Medicaid patients have reportedly declined in nearly one-third of the states, contributing to increased demand for Title V-supported care. It is critical, that if WIC programs are to provide the Gateway service to an integrated health care system, the Title V Block Grant must be raised to meet the increased demands on the Program.

Conclusion

In conclusion, Mr. Chairman, the NATIONAL ASSOCIATION OF WIC DIRECTORS, NAWD, looks forward to working with you and the members of the Subcommittee and Full Committee as you consider fiscal year 1994 appropriations for the WIC Program. NAWD's Executive Director, Douglas Greenaway, the members of the Board of Directors and I stand ready to assist you in any way possible during this process. Again, thank you for the opportunity to come before you today. I will gladly respond to any questions you may wish to address to me or provide you with supplemental information as you require.

FOOD AND DRUG ADMINISTRATION

WITNESSES

GERALD J. MOSSINGHOFF, PHARMACEUTICAL MANUFACTURING ASSOCIATION

SHERWIN GARDNER, GROCERY MANUFACTURERS ASSOCIATION

ROBERT G. BRITAIN, NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

RICHARD GODOWN, INDUSTRIAL BIOTECHNOLOGY ASSOCIATION AND THE ASSOCIATION OF BIOTECHNOLOGY COMPANIES

JUANITA DUGGAN, NATIONAL FOOD PROCESSORS ASSOCIATION

Mr. DURBIN. The next panel includes Gerald Mossinghoff; Sherwin Gardner; Robert Britain; Richard Godown and Juanita Duggan, and representing the Pharmaceutical and Grocery Manufacturers Association; National Electrical Manufactures Association; Industrial Biotechnology Association and the Association ofno-the Association of Biotechnology Companies and the National Food Processors Association.

We have your statements. It is weighed in and we welcome your testimony and invite you to summarize to get on the good side of this subcommittee.

Mr. SKEEN. And the association.

Mr. MOSSINGHOFF. Thank you. My name is Gerald J. Mossinghoff, President of Pharmaceutical Manufacturers Association. I will be very brief.

Last year, in what I regard as historic legislation, the Congress enacted a Prescription Drug User Fee Act of 1992. Now the legislation was the result of very close cooperation between the research-based pharmaceutical industry, the FDA and several committees of Congress.

We appreciate very much the advice and counsel that this committee provided to us throughout this drafting process. The successful implementation of legislation depends upon early action by Congress to approve the level of overall FDA appropriations that is required in that law.

As an essential first step, we strongly urge that language be included in the supplemental appropriations bill to trigger the first $36 million in fees in fiscal year 1993, as contemplated by the act. We hope you will agree and your colleagues will agree that we must seize the opportunity to begin the process of speeding up the review of new human drug applications in light of the major growth and in research and development on new medicines in our industry, and that is an investment that will translate into direct and tangible benefits to the American people.

Just in closing, Mr. Chairman, and in my statement I point out that just eight diseases alone not well treatable now by medications osteoporosis, diabetes, stroke, depression, arthritis, Alzheimer's, cancer and cardiovascular disease, cost the United States over $400 million a year.

Our industry has 328 medicines either in human clinical trials or are requesting approval at the FDA. There are enormous amplifying powers at the FDA to get those medicines through the system

and to the people in need, and we hope we can counted on there commitments to help us.

Mr. DURBIN. Thank you.

Mr. GARDNER. I am Sherwin Gardner, Senior Vice President of the Grocery Manufacturers of America, which is an 85-year-old national trade association whose members manufacture food sold in retail stores throughout the United States.

I am here today to present some views on the FDA budget and in particular about our views for user fees for the food industry. First of all, we believe the FDA is seriously underfunded. Its responsibilities have been increased continually by Congress and additional adequate resources have not been provided.

The Edwards Committee, which was charged by former Secretary Sullivan to look at the FDA and recommend how it could be strengthened and improved came to the same conclusion about the inadequacy of the agency's budget.

I was a member of that committee, and our May 1991 report recognized the difficult budget environment that now exists already, we also included recommendations for improving the agency's management practices and for setting program priorities.

Those recommendations are no less valid today than they were two years ago. On the question of user fees, GMA strongly opposes the imposition of FDA user fees on the food industry.

User fees will constitute an inappropriate tax on products that are essential to the health and well-being of the American public. In practical effect, user fees would constitute a Federal sales tax on food products. And for the same reason, we would also oppose USDA user fees beyond those that are now in effect for overtime work.

Our organization, the Grocery Manufacturers of America, supports a strong and vigorous FDA. With adequately-trained personnel and resources to enforce the Federal Food Drug and Cosmetic Act, the entire scope of food marketing activities by GMA members, from production through processing and packaging to ultimate retail sale is subject to FDA regulation enforcement.

Mr. GARDNER. Enforcement of the act is plainly for the benefit of all members of the public, and the agency deserves to receive the appropriations necessary to carry out its assigned task. There is no justification, however, for a new tax in the form of user fees on food manufacturers as a means of financing these regulatory activities. We appreciate the opportunity to come and present these views, Mr. Chairman.

Ms. DUGGAN. I am Juanita Duggan, Vice President for Government Affairs of the National Food Processors Association. I will ask that my written statement be included in the record, and I will summarize, hopefully very quickly.

NFPA appreciates the opportunity to express publicly our strong support for the food programs of the Food and Drug Administration and for a level of funding that will enable FDA to effectively perform its important mission. Most important of FDA's responsibilities to the food industry, of course, is to address food safety concerns.

Throughout its history, NFPA has been committed to improvement of food safety. Our organization was formed at a time when it

was necessary to improve public confidence in food safety. We are proud to have worked tirelessly to develop what are now standard industry practices to prevent botulism in processed foods; and the recent West Coast tragedies with E coli underscore the importance of vigilance against microbial contamination of food, which is by far the greatest food safety risk factor.

In addressing these concerns, FDA must take stock of the fact that the greatest vulnerabilities to food safety are present at precisely the point of greatest growth. State and locally regulated entities simply do not approach the rigorous sanitation and handling practices adhered to in food processing—the areas where FDA largely defers to State and local regulation. As FDA works with State and local regulatory officials to address these and other food safety challenges, the broad public health and welfare mission of FDA could not be clearer.

It is precisely because America as a whole benefits from the important public health work of FDA that the Agency's resources should come from appropriated funds. We are mindful that there are very well-intentioned persons who advocate FDA funding increases through so-called user fees imposed on the regulated industry.

Eager to expedite the approval of new drug applications, the prescription drug industry last year agreed to support legislation imposing fees as a way to increase the number of personnel available to review new drug applications. That is a situation far different from the food industry where, with the exception of an occasional food additive petition, FDA approval does not precede the marketing of foods. Under the current system we are proud to say that we have the safest food supply in the world.

We respectfully submit that the imposition of additional fees on the regulated industry would be an inappropriate means of providing agency resources. These are not user fees at all. They are not fees paid for a service the government provides at the discretion of the user as true user fees. Instead, these fees would operate as a regulatory tax. Industry would be taxed because it is regulated, and the cost of that tax would be passed on to consumers.

In addition, we have strong concerns that the integrity of FDA must be both real and perceived. For FDA to draw its funding from the industry it regulates would not enhance public confidence in the integrity of FDA and may distort agency priority-setting and activities. We have similar concerns, of course, about efforts to impose USDA regulatory fees for overtime shifts of meat and poultry inspection.

Mr. Chairman, we at NFPA are mindful that this committee has a great commitment to food safety, American competitiveness, and, of course, fairness in tax policy. While we would always like for FDA to have ample resources, we are mindful that this committee has done its utmost. We note that since 1986 FDA appropriations have consistently outstripped the rate of inflation. As a result of your efforts, FDA personnel levels and funding in real dollar terms are higher than in 1980.

The food industry would be supportive of any further increases in FDA funding that the committee can make through appropria-

tions. We appreciate the efforts of this committee and your consideration of our fees.

Thank you.

Mr. GODOWN. Mr. Chairman, I am Dick Godown, and I am here to say a kind word about the user fees that are already on the books, legislation which Congress passed last year. I would like to discuss why.

Our industry, the biotechnology industry, worked hard to achieve an effective consensus with the Congress and the FDA on this issue. We are proud of that effort and pleased with the results which represent what we believe to be an historic public-private partnership to enhance public health in this country. We urge this subcommittee to provide the supplemental appropriation FDA needs to begin implementing the program as soon as possible. Let me very briefly review the circumstances and principles on which last year's successful user fee initiative was founded.

Biotechnology is an industry of new small businesses. Many companies are thinly capitalized and have no existing product revenue. This set of circumstances led to the initial conclusion on our part that user fees would adversely impact biotechnology by diverting some of our already less-than-ample resources from the R&D activities on which we and our investors and shareholders and employees stake our companies. The industry faced competing pressures from delays in FDA review and approval of new biopharmaceuticals.

Federal budget constraints and the lack of appropriated increases in FDA funding, in combination with a dramatic increase in the development of new biotech products in the 1980s, pushed the Agency's Center for Biological Evaluation and Review, CBER, far beyond the limits of its resources; and at one point, estimates of the length of time it would take CBER to clear its review pipeline of biopharmaceutical applications ranged as high as 13 years.

Delays of that magnitude were especially threatening to small biotech companies' ability to meet financial obligations. Long regulatory review periods delayed income from product revenue which proved particularly problematic for companies with no existing products on the market.

Balancing these concerns along with patient concerns about bringing new therapies to the market in a timely manner led the biotechnology industry to reconsider its position on user fees. We agreed with congressional sponsors, Chairmen Dingell and Waxman, and Chairman Kennedy and Senator Hatch that appropriately crafted user fee legislation could provide FDA with much-needed additional resources.

We believe that the user fee bill enacted last year represents an effective consensus among industry, congressional and administrative interests. The legislation provides a mechanism for those different groups to focus their energies on a single socially productive goal and bringing necessary new therapies to the market and the patients as soon as possible. It allows all of us to work hardest at what we each do best, and the end result will be better patient care and better health for all America.

What is needed now, Mr. Chairman, is a supplemental appropriation for FDA in order to help them get this user fee program started.

Mr. DURBIN. Mr. Britain, the score is two to two on user fees. How do you come down on this?

Mr. BRITAIN. Thank you, Mr. Chairman.

My name is Robert Britain. I am Vice President for Medical Products of the National Electrical Manufacturers Association, which we call NEMA. NEMA has a medical division which represents the diagnostic imaging and therapy systems industry in this country; about 95 percent of that industry is represented.

Now, before offering specific comments on the fiscal year 1994 funding levels for FDA, we wish to express our deep concern regarding continued decreases in the number of product approval applications approved by FDA. Over the past several years the number of product approval applications submitted to the Agency has increased, whereas the number of new product applications approved by the Agency has decreased. The result has been a significant backlog in the number of 510(k) and PMA submissions pending before the Agency, and diminished patient access to new and beneficial health technologies.

We recognize that there are those who would argue that the only solution to this backlog in product approval lies in the form of user fees to be assessed from the medical device industry. We take exception to this point of view. Rather, we maintain that the current backlog in PMA and 510(k) submissions is due to a lack of appropriate funding for FDA operations and the need for some innovative management of existing resources.

Although the administration's fiscal year 1994 funding recommendations remain unknown, FDA estimates place the cost of implementing Safe Medical Device Act at $26 million or 300 FTEs. We request that the subcommittee, in considering the fiscal year 1994 FDA appropriation, provide the resources necessary to meet these statutory mandates.

NEMA is aware that legislation was enacted in the last Congress which would impose user fees upon pharmaceutical and biotechnology industries. We believe that this legislation should be given a chance to work before additional discussions regarding the assessment of user fees from the medical device industry are initiated. At this juncture it is simply premature to begin a meaningful discussion as to the utility, and in the practical sense, of medical device user fees.

Finally, NEMA is aware that the administration has proposed user fees for both medical device and pharmaceutical industries for purposes of deficit reduction. NEMA remains opposed to the expenditure of user fees for revenue for this purpose. We note the existence of language in the Senate Budget Committee report for fiscal year 1994 which states that "Previously enacted food and drug user fees are being used to ensure adequate funding for FDA approval and certification activities, and assumes that any additional fees which may be enacted will be used for the same purpose." NEMA fully supports the position of the Senate Budget Committee on this matter and respectfully urges members of this subcommittee to consider adopting similar language.

And we certainly appreciate the opportunity to provide testimony today, Mr. Chairman. Thank you.

Mr. DURBIN. Mr. Britain, you said one way out of our dilemma here is if FDA would get involved in innovative management. Then you turned around and asked us to come up with $39 million for some more employees out there.

I prefer the innovative management alternative. Which is it?

Mr. BRITAIN. Well, we are working with FDA on ways to find some innovation, and especially in the 510(k) process, because when we talk about 510(k)s and PMAs, we are talking thousands of 510(k)s and PMAs, so really the innovation should come into where the volume is.

Now, we can reduce the number of 510(k)s coming in, we can raise the threshold of when a 510(k) is required, cut out perhaps hundreds and maybe a thousand reports coming in a year. We can reduce the number of, the kinds of information that is required. I think FDA has gone from a, let's see if the product is equivalent to something that was manufactured a few years ago, to let's make sure it is really safe and effective in a 510(k). So we are getting 510(k)s that are more voluminous and having different information put into them. The Agency is begging to be inundated by changing the 510(k) system into that process.

We can use the fact that there are consensus standards that exist and are being developed. FDA could use the fact that manufacturers are complying with those international and domestic consensus standards as the bulk of the 510(k). If these standards answer all the questions that FDA would like out of a 510(k), let's let a manufacturer simply certify that he meets those standards in the 510(k). You could probably come out with a two- or three-page 510(k) if the right standards exist.

So these are just a few examples, but there are ways of looking at things differently than we do now.

Mr. DURBIN. We have got our hands full here. You have identified two of the acts that you are interested in seeing full funding so that we can see the FDA implement congressional direction. There is another one, CLIA, which is also very expensive, and one that most Members of Congress, myself included, felt was necessary; and it is our job here to come up with the money, which is no mean feat while trying to reduce the deficit.

I would just say on the subject of user fees, you don't have to fear this committee creating a new user fee for anyone that doesn't have one now. That really isn't our job to do; and in the case of the pharmaceutical manufacturers, in fact, the authorization committee sat down and did the hard work. We gave them some advice, but they really deserve the credit for the user fee. I might say parenthetically, I agree with your comment about the stated purpose of that user fee to be additive, and we are going to be working with the administration in terms of a supplemental budget request to try to make that point again when it comes our way.

Mr. MOSSINGHOFF. We really appreciate that.

Mr. DURBIN. I will just say in closing on this subject, I think the bloom is off the rose here for everybody on the panel. We now have a user fee as applies to the pharmaceutical industry. I don't know where the next one will come from. I do believe that the logic

which led to the conclusion that it was appropriate for pharmaceuticals may also lead us to the conclusion that it is appropriate in other places. Where the pharmaceutical companies could at least consider the possibility that a prompt response to their request for drug approval would mean more profit, certainly people who are in the grocery and food industry have to understand that a food safety crisis could be just as expensive to them as the delay in waiting for approval on a new drug. We want to make sure that this agency really does what it is supposed to do; and it has a lot to do, a lot more than we provide the money for.

So if anybody has any comments—Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman. Just one question.

Mr. Godown, you used the phrase "appropriately crafted user fees." Would you give me an example of what you mean by that?

Mr. GODOWN. Well, the user fees come from a variety of different sources. They come from product fees when you have a product already on the market, they come from facility fees, and they also come from a fee that you pay when you are asking the Agency to do the initial approval.

Mr. SKEEN. So do you determine it by the product? What is an appropriately crafted user fee?

A user fee is a user fee.

Mr. GODOWN. Well, a user fee is a user fee.

Mr. SKEEN. A fee is a fee is a fee.

Mr. GODOWN. Yes. It applies at different amounts, and it applies in different places.

Mr. SKEEN. That is what I was getting at, because ultimately the consumer pays for them.

Mr. GODOWN. Actually, it is the company who pays if they are paying the consumer fee.

Mr. SKEEN. The company may pay them, but then it adds them to the cost of production; do they not?

Mr. GODOWN. That would depend on the financial circumstances of the company. It wouldn't be unusual to see that happen; that is true.

Mr. SKEEN. I thought there was always a pass-through. Only in agriculture, there are no pass-throughs.

Mr. GODOWN. We are a new industry in biotech. I can't speak for them all.

Mr. SKEEN. Thank you. I appreciate the response. I wanted to get a clarification of what you really meant, because the idea intrigued me. I will go back and study your testimony, but I appreciate the approach.

Mr. GODOWN. Thank you. We will be glad to help in any way we can, sir.

Mr. SKEEN. Thank you, sir.

[The prepared statements follow:]

Statement

Pharmaceutical Manufacturers Association

GERALD J. MOSSINGHOFF
PRESIDENT
PHARMACEUTICAL MANUFACTURERS ASSOCIATION

ON THE BUDGET OF THE
FOOD AND DRUG ADMINISTRATION

BEFORE THE SUBCOMMITTEE ON AGRICULTURE, RURAL
DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

APRIL 1, 1993

Mr. Chairman and Members of the Subcommittee:

I am Gerald J. Mossinghoff, President of the Pharmaceutical Manufacturers Association. PMA represents more than 100 research-based pharmaceutical companies that discover, develop, and produce most of the prescription medicines used in the United States. I am pleased to have this opportunity to appear before the Subcommittee to present our recommendations on the Fiscal Year 1994 budget for the Food and Drug Administration, as well as supplemental funding for Fiscal Year 1993.

As you know, last year the Congress enacted the Prescription Drug User Fee Act of 1992. This historic legislation was the result of close cooperation between the research-based pharmaceutical industry, the FDA, and the appropriate Congressional committees and their staff. We appreciate the advice and counsel that this Committee and its

staff provided throughout the drafting process. The successful implementation of that legislation depends upon early action by Congress to approve the level of overall FDA appropriations that is required under that law. That Act mandates that user fees are to be additive to the FDA baseline level of appropriations for salaries and expenses for Fiscal Year 1992, indexed annually for inflation, and they must be applied solely to improving FDA's drug review and approval process.

As an essential first step, we strongly urge that language be included in a supplemental appropriations bill to trigger the first $36 million in fees in Fiscal Year 1993, as contemplated by the Act. We hope you agree that we must seize this opportunity to begin the process of speeding up the review of new human drug applications, in light of the major growth in research and development on new medicines -- an investment that translates into direct benefits to the American people.

The pharmaceutical industry has doubled its R&D investment every five years since 1970. This year, the industry will invest an estimated $12.6 billion in research and development -- a 13.5 percent increase over 1992, and amounting to 16.7 percent of sales this year.

This investment means new medicines. New medicines save lives and avoid or reduce the costs of hospital care, treatment, and nursing homes. Clear examples of major savings include a new drug for schizophrenia, drugs for treatment of

certain types of heart disease, and effective anti-ulcer drugs. Moreover, pharmaceutical companies have a total of 328 medicines in testing for just eight currently uncured diseases -- osteoporosis, diabetes, stroke, depression, arthritis, Alzheimer's, cancer and cardiovascular diseases. The cost of these eight diseases amounts to over $400 billion a year.

The Food and Drug Administration must have adequate resources to deal with the backlog produced by dramatic advances in several health products fields, especially the dramatic progress being made in the field of biotechnology. Increased appropriations for FDA are also essential for the implementation of a number of public health and safety mandates enacted by Congress in recent years.

We understand that the FDA Council, an important public-interest coalition of patient and healthcare provider groups, has recommended that FDA receive $842 million in appropriations in Fiscal Year 1994 -- an increase of about $62 million over the current-year level. We fully support this recommendation. This should be augmented by the provision of an additional $54 million in user fees pursuant to the Prescription Drug User Fee Act of 1992.

We recognize the need to hold the line on overall Federal spending, but we believe it is essential that the FDA budget be increased over the current-year level. An FDA budget freeze would result in a staffing cutback and would be completely

contrary to the important policy objective of improving access to quality healthcare for the American people. A reduction in FDA staff resources would inevitably slow the process for bringing new and better medicines to the American people.

Mr. Chairman, over the years the House Committee on Appropriations has provided vital support to FDA in spite of severe budget pressures, and it has opposed proposals for user fees that do not increase FDA resources. We strongly encourage the Committee to maintain these positions and to provide the increased appropriations and dedicated user fees that are required if FDA is to be able to fulfill its critically important mission.

Mr. Chairman, that concludes my prepared statement. I will be pleased to answer any questions that you or other members of the Subcommittee may have.

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GROCERY MANUFACTURERS OF AMERICA

Statement of

SHERWIN GARDNER

Senior Vice President, Science and Technology

GROCERY MANUFACTURERS OF AMERICA, INC.

before the

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
AND RELATED AGENCIES
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES

on

FDA USER FEES

April 1, 1993

1010 Wisconsin Avenue, N.W. ★ Suite 900 ★ Washington, D.C. 20007 ★ 202/337-9400 ★ FAX 202/337-4508

Statement of

SHERWIN GARDNER

Senior Vice President, Science and Technology

GROCERY MANUFACTURERS OF AMERICA, INC.

Mr. Chairman and members of the Committee, I am Sherwin Gardner, Senior Vice President, Science and Technology of the Grocery Manufacturers of America, Inc. (GMA).

GMA is an 85-year old national trade association comprised of over 130 companies which manufacture food sold in retail stores throughout the United States. Member companies employ over 2.5 million people nationwide and have annual sales in excess of $280 billion that represent more than 85 percent of the packaged food sold at retail in the United States.

We appreciate the opportunity to comment on the FDA budget for 1994 and, in particular, our views about user fees for the food industry. With regard to the FY 1994 appropriation, there isn't a specific proposal to address, and therefore our comments can only be of a general nature. We would be pleased to provide the Committee with comments on a specific appropriation proposal when it is available.

We believe the FDA is seriously underfunded; its responsibilities have been increased continually by Congress, but additional adequate resources have not been provided. An example of this is the NLEA of 1990: only one million dollars were appropriated in FY 1992 for FDA's implementation of this law requiring wholesale revision of food labeling requirements — at the same time it was to carry on its existing responsibilities.

The Edwards Committee, chartered by former Secretary Sullivan to look at the FDA and recommend how it could be strengthened and improved, came to the same conclusion about the inadequacy of the agency's budget. I was a member of that Committee, and our May 1991 report recognized the difficult budget environment that now exists. Therefore we also included recommendations for improving the agency's management practices, and for setting program priorities. The Committee's recommendations for additional resources, improved management practices and priority settings are no less valid today than they were less than two years ago.

Turning to the issue of user fees, GMA strongly opposes the imposition of FDA user fees on the food industry. User fees would constitute an inappropriate tax on products essential to the health and well-being of the American public. In practical effect, user fees would constitute a federal sales tax on food products.

GMA supports a strong and vigorous FDA, with adequate trained personnel and resources to enforce the Federal Food, Drug, and Cosmetic Act (FD& C Act). The entire scope of food marketing activities by GMA members — from production, through processing and packaging, to ultimate retail sale — is subject to regulation by FDA. Enforcement of the Act is plainly for the benefit of all members of the public, and the Agency deserves to receive the appropriations necessary to carry out its assigned tasks. There is no justification, however, for a new tax in the form of user fees on food manufacturers as a means of financing these regulatory activities.

FDA user fees have been under discussion for a number of decades. In 1971, the General Accounting Office published a report recommending that fees be imposed for new drug applications. FDA opposed user fees at that time, on the ground that regulation benefits

the entire public and not just individual companies. Although Congress and FDA subsequently have debated the merits of this approach, the notion of imposing user fees to finance FDA regulation of food products generally had never been proposed until last year.

User fees, by definition, are intended to reimburse agencies for the particular benefits they provide to regulated companies. As the Supreme Court held nearly two decades ago, the imposition of user fees on regulated companies for benefits enjoyed by the general public is nothing more than another tax on industry. National Cable Television Association v. United States, 415 U.S. 336, 340–341 (1974).

1992 USER FEE LEGISLATION FOR DRUGS

The Prescription Drug User Fee Act of 1992 comports with these legal standards by imposing a fee for each new drug application and a yearly fee for each approved prescription drug product and each establishment in which an approved prescription drug is manufactured.

The 1992 Act included assurances that user fees would be dedicated to improving the new drug approval process rather than used as another source of general operating revenue for the Agency. It was explicitly based upon FDA performance objectives for improvement in FDA review of new drug applications, supplemented by the express statutory requirement that user fees may only be used to supplement existing FDA appropriations. Taken together, these provisions ensure that pharmaceutical companies will reap a tangible and immediate economic benefit from the substantial user fees levied under the law.

The 1992 Act also established an important principle of the application of user fees—that the funds collected be specifically applied to the agency programs that generated them. This was also a conclusion reached by the Edwards Committee, which said that any user fees should supplement, not substitute for, an adequate base of appropriations. In brief, user fees should not be a deficit reduction device. GMA endorses that principle.

USER FEES FOR FOOD PRODUCTS ARE INAPPROPRIATE

The logic of user fees for prescription drugs does not, however, carry over to food products subject to FDA regulation. Food products are not subject to premarket approval requirements. They are manufactured and marketed without the registration of manufacturing and distribution establishments, or the listing of individual food products, with FDA. Food products are therefore regulated in ways that are fundamentally different from FDA review of new drug applications.

First, FDA principally regulates food by taking regulatory action against adulterated and misbranded products. FDA responsibilities in the food area are largely dedicated to enforcement activities which benefit the public at large and which therefore are properly funded out of general revenues. FDA acts like a policeman, bringing enforcement action against companies that violate the law. User fees for food products would therefore be like user fees for all citizens to pay policemen and firemen.

Second, in the absence of a premarket approval procedure such as that used for prescription drugs, it is not feasible to develop FDA performance objectives for enhancing Agency activities that provide direct benefits to the food industry. User fees would simply be an additional tax on food products, to be passed on to the consumer in the form of higher food prices.

Third, the imposition of user fees in food companies would encounter serious practical difficulties. Unlike drug companies which are subject to FDA registration and product listing requirements, there is at present no way to identify all of the hundreds of thousands of food establishments and food products for which user fees might be imposed.

New registration and listing requirements would only add further costs for both FDA and the food industry. Unlike new drugs, food manufacturers may change product formulas on a daily basis, thus creating "new" products all the time. A user fee for products would therefore be a virtual impossibility.

APPLICATION FEES FOR FOOD ADDITIVE PETITIONS WOULD BE UNJUSTIFIED

The only type of food product for which any form of FDA premarket approval is required is for individual new food additives. There are fewer than one new direct food additive petition every year.

Even a user fee requirement related solely to food additive petitions would be inappropriate. Unlike a new drug application, which gives the successful applicant an exclusive private license to sell a drug product, a food additive petition results in promulgation by FDA of a nonexclusive public regulation authorizing use of the additive by any person wishing to do so.. That is why there are so few of these petitions. A food additive petition directly benefits competitors as well as the petitioner. Serious fairness concerns would be raised if only the petitioner were required to pay for an FDA service that inures to the benefit of the entire food industry. Innovative products would be unfairly penalized.

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In conclusion, GMA opposes any efforts to extend the user fee concept to the food industry. The imposition of such fees on manufacturers of prescription drug products is not in any respect analogous to the imposition of user fees on the food industry.

NATIONAL FOOD PROCESSORS ASSOCIATION

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Statement of

Juanita Duggan
Vice President, Government Affairs

National Food Processors Association

Before the

Rural Development, Agriculture, and Related Agencies
Subcommittee of the House Committee on Appropriations

Hearing on the

FY 1994 Budget

For the U.S. Food and Drug Administration

April 1, 1993

Mr. Chairman: I am Juanita Duggan, Vice President for Government Affairs of the National Food Processors Association (NFPA), which is a trade association representing more than 500 member companies engaged in the production of food. NFPA members include manufacturers of processed-packaged fruits and vegetables, juices, meat and poultry, seafood products and specialty products preserved through canning, freezing, dehydration, pickling and other methods. NFPA members also include suppliers to the food industry.

NFPA is a science-based trade association with three state of the art food science research laboratories staffed by more than 100 scientists. NFPA's laboratories conduct studies on food safety, nutritional content of food and innovative food processing and packaging technologies designed to promote optimal safety, wholesomeness and nutritional value of food products. The technical expertise of NFPA is brought to bear in its representation of its member companies in matters of scientific, government and consumer affairs.

NFPA appreciates the opportunity to express publicly our strong support for the food programs of the Food and Drug Administration (FDA) and for a level of funding that will enable FDA to effectively perform its important mission. In the food area alone, FDA faces imposing responsibilities. Having admirably met the duty to promulgate regulations to implement the Nutrition Labeling and Education Act, FDA is now working with industry for implementation of those regulations, which is a complex and challenging responsibility. A responsive and thoughtful approach by the FDA to the numerous issues that arise in

implementation of such complex and voluminous regulations can minimize waste and save industry and consumers money.

Even more important is FDA's effort to address food safety concerns. Throughout its history, NFPA has been committed to improvement of food safety. Our organization was formed at a time when it was necessary to improve public confidence in food safety; we are proud to have worked tirelessly to develop what are now standard industry practices to prevent botulism in processed foods. The recent West Coast tragedies with E. coli 0157:H7 underscore the importance of vigilance against microbial contamination of food, which is by far the greatest food safety risk factor.

In addressing these concerns, FDA must take stock of the fact that the greatest vulnerabilities to food safety are present at precisely the point of greatest growth. State and locally regulated entities simply do not approach the rigorous sanitation and handling practices adhered to in food processing -- the areas where FDA largely defers to state and local regulation. As FDA works with state and local regulatory officials to address these and other food safety challenges, the broad public health and welfare mission of FDA could not be clearer.

It is precisely because America as a whole benefits from the important public health work of FDA that the agency's resources should come from appropriated funds. We are

mindful that there are very well intentioned persons who advocate FDA funding increases through so-called "user fees" imposed on the regulated industry.

Eager to expedite the approval of new drug applications, the prescription drug industry agreed last year to support legislation imposing fees as a way to increase the number of personnel available to review new drug applications. That is a situation far different from the food industry, where with the exception of an occasional food additive petition, FDA approval does not precede marketing of foods. Of course, we are pleased to note that Americans have the safest food supply in the world.

We respectfully submit that the imposition of additional fees on regulated industry would be an inappropriate means of providing agency resources. These are not user fees at all. They are not fees paid for a service the government provides at the discretion of a user, as with user fees. Instead, these fees would operate as a regulatory tax. Industry would be taxed because it is regulated. The cost of that tax would be passed on to consumers through inflated costs of food. As it is well-established that low-income Americans spend a higher percentage of their disposable income on food than other groups, the extent to which they would bear the true burden of such a regulatory tax should be clear. Thus, this regulatory tax would be highly regressive. Of course, it should also be noted that the integrity of FDA must be both real and perceived. For FDA to draw its funding from the industry it regulates would not enhance public confidence in the integrity of FDA and may distort agency priority setting and activities.

Mr. Chairman, we at NFPA are mindful that this committee has a great commitment to food safety, American competitiveness and, of course, the question of fairness in tax policy. While we would always like for FDA to have ample resources, we are mindful that this committee has done its utmost. Since FY 1986, FDA appropriations have consistently outstripped the rate of inflation. As a result of your efforts, FDA personnel levels and funding in real dollar terms is higher than in FY 1980.

The food industry would be supportive of any further increases in FDA funding that the Committee can make through appropriations.

Mr. Chairman, we appreciate the efforts of this Committee and your consideration of our views.

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TESTIMONY OF

RICHARD GODOWN

ON BEHALF OF

THE INDUSTRIAL BIOTECHNOLOGY ASSOCIATION

AND

THE ASSOCIATION OF BIOTECHNOLOGY COMPANIES

BEFORE THE

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT

AND RELATED AGENCIES

OF THE COMMITTEE ON APPROPRIATIONS,

U.S. HOUSE OF REPRESENTATIVES

APRIL 1, 1993

I am Richard Godown, and I am appearing here today on behalf of the Industrial Biotechnology Association (IBA) and the Association of Biotechnology Companies (ABC). We appreciate the opportunity to join you here today to discuss fiscal year 1994 appropriations for the Food and Drug Administration.

IBA and ABC together include more than 250 companies which account for over 90% of all biotechnology R&D investment in the U.S. The two groups will merge later this year and the new trade association will be called BIO, the Biotechnology Industry Organization.

Before I address FY94 funding for FDA, I would like to discuss user fees. Our industry worked hard to achieve an effective consensus with the Congress and the FDA on this issue. We are proud of that effort and pleased with the result, which represents what we believe to be an historic public-private partnership to enhance public health in this country. We urge this Subcommittee to provide the supplemental appropriation FDA needs to begin implementing the program as soon as possible.

I would like to briefly review the circumstances and principles on which last year's successful user fee initiative was founded.

Biotechnology is an industry of new, small businesses. Many

companies are thinly capitalized and have no existing product revenue. This set of circumstances led to the initial conclusion that user fees would adversely impact biotech by diverting some of our already less than ample resources from the R&D activities on which we -- and our investors, shareholders and employees -- stake our companies.

But the industry faced competing pressure from delays in FDA review and approval of new biopharmaceuticals. Federal budget constraints and a lack of appropriated increases in FDA funding, in combination with a dramatic increase in the development of new biotech products in the 1980s, pushed the agency's Center for Biologic Evaluation and Review (CBER) far beyond the limits of its resources. At one point, estimates of the length of time it would take CBER to clear its review pipeline of biopharmaceutical applications ranged as high as 13 years.

Delays of that magnitude were especially threatening to small biotech companies' ability to meet financial obligations. Long regulatory review periods delayed income from product revenue, which proved particularly problematic for companies with no existing products on the market.

Balancing these concerns, along with patient concerns about bringing new therapies to the market in a timely manner, led the biotechnology industry to reconsider its position on user fees. We

agreed with congressional sponsors, Chairmen Dingell and Waxman and Chairman Kennedy and Senator Hatch, that appropriately crafted user fee legislation could provide FDA with much needed additional resources.

We believe that the user fee bill enacted last year represents an effective consensus among industry, congressional and Administration interests. The legislation provides a mechanism for those different groups to focus their energies on a single, socially productive goal: bringing necessary new therapies to the market and to patients as soon as possible. It allows all of us to work hardest at what we each do best, and the end result will be better patient care and better health for all Americans.

The user fee bill includes several important principles, which will help us achieve this result:

* FDA user fees -- which will be additive to current appropriation levels -- will be used only to improve the timeliness and quality of review of new product applications, not for any other agency purpose or for deficit reduction.

* The fees, which have been set at reasonable levels, will be raised from a combination of annual establishment fees, annual product fees, and one time application fees.

* Consideration was given to potential hardship to small businesses, defined in the bill as companies with fewer than 500 employees. Those small companies whose first prescription drugs have not yet been approved by FDA will pay a new product application fee that is reduced by 50%, with payment deferred by one year after the fee would otherwise be due. Fees may be further reduced or waived altogether if the Secretary finds that the fee would present a significant barrier to innovation because of limited resources available to the company.

* In order to ensure that the new funds will be used to improve FDA review of new drugs and biologics, the bill included reference to specific performance standards to which FDA has agreed. It also included a sunset clause to allow evaluation of the program before it is reauthorized.

Once implemented, FDA user fees will allow the agency to hire more reviewers and to evaluate new product applications more expeditiously. We believe that the result will not only strengthen our industry, but will advance the public health by allowing us to bring new and needed biopharmaceuticals to the market and to patients as rapidly as possible.

As this Subcommittee is aware, however, the legislation requires passage of a supplemental appropriation. Together with the millions of AIDS patients, cancer patients and others who

suffer from the diseases for which therapies are presently under regulatory review, the biotechnology industry urges you to act on a supplemental bill for this purpose in the very near future.

On FY94 appropriations for FDA, I would just comment that discussion of this issue is made difficult by the absence of a request for this purpose by the Administration. We are confident, however, that both President Clinton and this Subcommittee are very well aware of the important work conducted by the FDA and that you will, together, ensure that the agency has the resources it needs to carry on effectively.

Thank you.



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Diagnostic Imaging and Therapy Systems Division

STATEMENT OF THE DIAGNOSTIC IMAGING AND THERAPY SYSTEMS DIVISION

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

ON

FY 1994 FUNDING LEVELS FOR THE FOOD AND DRUG ADMINISTRATION

SUBMITTED TO THE SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES

HOUSE APPROPRIATIONS COMMITTEE

HON. RICHARD DURBIN (D-IL), CHAIRMAN

APRIL 1, 1993

The Diagnostic Imaging and Therapy Systems Division of the National Electrical Manufacturers Association is pleased to provide testimony on FY 1994 funding levels for the Food and Drug Administration. NEMA, with headquarters in Washington, D.C., represents more than 95% of U.S. manufacturers of x-ray imaging, computed tomography, magnetic resonance imaging, diagnostic ultrasound, and nuclear imaging equipment. In addition, the division represents manufacturers of picture archiving and communications systems, as well as manufacturers of extracorporeal lithotripters and radiation therapy equipment.

Before offering specific comments on the FY 1994 funding levels for the Food and Drug Administration, NEMA wishes to express its deep concern regarding continued decreases in the number of product approval applications approved by FDA per year. Over the past several years, the number of product approval applications submitted to the agency has increased, whereas the number of new product applications approved by the agency has decreased. The result has been a significant backlog in the number of 510(k) and PMA submissions pending before the agency, and diminished patient access to new and beneficial health care technologies.

With respect to 510(k) approvals, which provide the route to market for incremental changes in existing medical technologies, FDA reports a significant increase in the number of 510(k) submissions pending more than ninety days, from two submissions in

November 1991 to seven hundred thirteen submissions in November 1992. Moreover, the number of pending original 510(k)s has nearly doubled from 2,444 in November 1991 to 4,265 in November 1992. Similarly, the total number of completed pre-market approvals (PMAs) for breakthrough devices has continued on a steady downward trend from almost fifty per year during the late 1980's to twenty-seven per year in 1991, to only twelve in 1992. We consider this situation to be unacceptable, and we believe that it must be remedied immediately.

NEMA recognizes that there are those who would argue that the only solution to this backlog in product approvals lies in the form of user fees to be assessed from the medical device industry. We take exception to this point of view. Rather, NEMA maintains that the current backlog in PMA and 510(k) submissions is attributable to a lack of appropriate funding for FDA operations and inadequate management of existing resources. With respect to the latter point, NEMA stands ready to work with members of the subcommittee and the agency towards the more effective management of FDA resources. We anxiously await the release of a forthcoming report prepared by the Subcommittee on Oversight and Investigations of the House Energy and Commerce Committee outlining proposed changes in the management of FDA's Center for Devices and Radiological Health, and look forward to working with agency officials towards the implementation of the report's recommendations.

In addition to the difficulties encountered by FDA in the management of its existing resource base, NEMA believes that much

of FDA's current resource dilemma is attributable to a shortfall in FDA funding in the face of new statutory mandates. As the Advisory Committee on the Food and Drug Administration noted in its May 1991 report, "The FDA has been placed in an almost untenable position in the past decade as Congress has relentlessly added new responsibilities without providing the resources to carry them out...Alarmingly, the Agency faces challenges ahead that are likely to be even more dramatic than those that have already occurred." For example, for FY 1993, the Bush administration requested an appropriation of $797 million for FY 1992 operations, a funding level consistent with current operating expenditures and not allowing for any program increases. As a result, while the $780 million appropriation that FDA received for FY 1993 represented a $32 million increase over the FY 1992 appropriation of $748 million, it did not allow FDA to maintain current operations, and it did not take into account FDA's new statutory responsibilities stemming from the Safe Medical Devices Act.

Although the administration's FY 1994 funding recommendations remain unknown, FDA estimates place the cost of implementing the Safe Medical Devices Act at $26 million, or 300 FTEs. Thirteen million dollars or fifty FTEs are estimated for the implementation of the Mammography Quality Standards Act. NEMA requests that the subcommittee, in considering the FY 1994 FDA appropriation, provide the resources necessary to meet these statutory mandates. NEMA also requests the opportunity to provide additional comments on the

FY 1994 FDA appropriation following formal submission of the President's budget proposal.

While we do not dispute the contention that the Food and Drug Administration needs additional resources, we dispute the notion that user fees would lead to increased efficiency in FDA operations. With respect to the user fee revenue which would have been assessed from medical device manufacturers, FY 1993 FDA budget estimates placed user fee revenue from new device applications at 6.8 million. By contrast, actual program increases for new device review were estimated at only 1.4 million. This means that 80% of the user fee revenues collected from device manufacturers would have been applied to areas other than expanded device review efforts. Thus, had the FY 1993 user fee proposal been enacted, it appears as if device manufacturers would have seen only a small fraction of the revenues expended on FDA user fees translated into expansions of device review activities.

Additional uncertainties persist as to how a user fee proposal would be implemented. Absent relevant authorizing legislation from the administration, it is difficult to arrive at an adequate assessment of the extent to which the benefits associated with user fees will exceed the costs. The most recently discussed proposals have been predicated upon a hybrid system consisting of product approval fees, facility registration fees, product listing fees, and import assessments. NEMA believes that these proposals raise a number of unanswered questions. Chief among these are questions of equity, scope, collection, administration, compliance, and

allocation within various FDA functions. The potential for multiple assessments under such a hybrid system abounds, as firms will be asked to continue to pay fees on thousands of products long after they have been evaluated and approved. The deleterious impact of this scheme of incremental taxation is readily apparent. At a time at which U.S. industry is struggling to maintain its competitive posture, the wisdom of such a tax on innovation is at best questionable.

NEMA is aware that legislation was enacted in the last Congress which would impose user fees upon the pharmaceutical and biotechnology industries. NEMA believes that this legislation should be given the chance to work before additional discussions regarding the assessment of user fees from the medical device industry are initiated. At this juncture, it is simply premature to begin a meaningful discussion as to the utility, in a practical sense, of medical device user fees.

Finally, NEMA is aware that the Clinton administration has proposed user fees for both the medical device and pharmaceutical industries for purposes of deficit reduction. NEMA remains opposed to the expenditure of user fee revenue for this purpose. NEMA notes the existence of language in the Senate Budget Committee Report for FY 1994 which states that "previously enacted Food and Drug Administration user fees are being used to ensure adequate funding of FDA approval and certification activities, and assumes that any additional fees which may be enacted will be used for the same purpose." NEMA fully supports the position of the Senate

Budget Committee on this matter, and respectfully urges members of this subcommittee to consider adopting similar language.

NEMA appreciates this opportunity to provide testimony on the resource needs of the Food and Drug Administration, and looks forward to working with subcommittee members to find the financial resources which the Food and Drug Administration needs to carry its important work into the twenty-first century.

ANIMAL PLANT HEALTH INSPECTION SERVICE/FOOD SAFETY INSPECTION SERVICE

WITNESS

MICHAEL J. COPPS, SENIOR VICE PRESIDENT, LEGISLATIVE AFFAIRS, AMERICAN MEAT INSTITUTE

Mr. DURBIN. Michael Copps of the American Meat Institute who thought he would be testifying around 6:00 p.m.

I know overtime is a big issue with Federal meat inspectors. We are deep into overtime on this subcommittee; we are on the second shift and in the middle.

Mr. Copps, we have your statement for the record, we will put it in in its entirety, verbatim, seriatim. If you would like to summarize, we will be glad to hear it.

Mr. COPPS. Thank you, sir.

Mr. Chairman, Mr. Skeen, American Meat Institute is grateful for this opportunity to testify. Perhaps in light of your previous comment on user fees, I don't need to testify at all, but let me visit the subject of the inspection fees for just a moment.

Once again this year the executive branch is proposing fees for a significant portion, perhaps about 20 percent, of meat and poultry inspection. This committee-subcommittee has historically, and we think correctly, taken the view that such fees cannot be imposed absent a change in the authorizing statutes, and hope you will not deviate from that position this year.

This proposal is a stunning reversal, stunning about-face for a 90-year-old program whose sole objective is the health and safety of the American people.

Interestingly, we traveled down this road once before. Congress in 1947 enacted fees for meat and poultry inspection. That experiment was such a miserable failure that less than one year later, the same Congress, in 1948, repealed the program and concluded—and this is an interesting quotation, I think, "Inspection is obviously for the benefit of consumers in general, the public rather than for the benefit of processors or producers. The cost of inspection should be paid out of the general funds of the Federal Government, not only because inspection is a proper charge against the people as a whole, but because it is the only way in which consumers can be assured of effective, uncompromising inspection, in which they can repose the fullest confidence."

The General Accounting Office agrees, even the cost-cutting Grace Commission eight or nine years ago affirmed that meat and poultry inspection was a mandatory government inspection, and as such, should be publicly funded.

So we believe very firmly that broad-based public health programs are not acceptable vehicles for raising revenue.

There are heavy economic costs involved in the proposal. They are detailed in my statement. I won't go into them here, but they put at risk our American exports, put at risk our thousands of jobs in rural communities that the administration is trying to jumpstart economically with its program right now. Inevitably, with a food tax of this nature, producers are going to receive less for live-

stock; consumers are going to pay more for their food because this would constitute a $520 million tax on the industry over a five-year period.

We don't know of any consumer, any producer, any labor or industry organization or any public policy group which supports this proposal. We believe this is a time to be strengthening the credibility of our Nation's food safety and public health programs.

A word very quickly on the market promotion program, which is also detailed in our testimony. By the end of this century, just a very few years, meat and poultry will perhaps be our country's largest agricultural export. Value-added products are, as most of us know, the fastest growing agricultural exports; and I think most of us know also that it is the European Economic Community that is currently reaping most of the rewards of that value-added export sector, somewhere in the vicinity of 35 or 40 percent.

As our competitors deploy every device to enhance their market share, it is our strong belief that we should not be setting aside the one comparatively modest program that the United States has to encourage the growth of U.S. market share. We don't believe that MPP is or should be the complete response to America's export challenge, but is a critical piece of the mosaic. It has demonstrably enhanced our competitive position in a number of critical overseas markets.

And finally, for purposes of the current GATT negotiations, if they become current again, MPP is considered a "green box," or a sanctioned, trade program. To forego a program which is effective and whose legality is not being questioned by our trading competitors could only further disadvantage us in our trade negotiations; and I think it would be the wrong signal at the wrong time for all of the wrong reasons.

There are a number of other subjects detailed in my testimony, but I know time is short, and I will conclude with that observation and be happy to answer any questions.

Mr. DURBIN. Mr. Copps, what is the market value of products inspected by the FSIS each year?

Mr. COPPS. I don't have a figure on what that would be.

Mr. DURBIN. Do you have a guess? Do you think the user fee would be $104 million? I am trying to put it into perspective as to how much product is inspected by FSIS.

Mr. COPPS. I would say roughly, if you included the meat and the poultry industries, $65–$60 or $65 billion.

Mr. DURBIN. Mr. Skeen.

Mr. SKEEN. I have no questions.

Mr. DURBIN. Thank you for joining us. We have had an opportunity to talk a little earlier. You have been very patient for waiting.

Mr. COPPS. Yes, appreciated that.

[The information follows:]

TESTIMONY

OF

THE AMERICAN MEAT INSTITUTE

TO

AGRICULTURE, RURAL DEVELOPMENT, FDA,

AND RELATED AGENCIES SUBCOMMITTEE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

WASHINGTON, DC

APRIL 1, 1993

PRESENTED BY

MICHAEL J. COPPS

SENIOR VICE PRESIDENT

LEGISLATIVE AFFAIRS

Mr. Chairman and Members of the Committee, The American Meat Institute is grateful for the opportunity to testify before you today. AMI is the nation's oldest and largest meat and poultry industry trade association. Our 900 member companies pack and process the complete range of beef, pork, veal, lamb and turkey products. Our membership accounts for more than 90 percent of the red meat products, and half of the turkey products, produced in this country.

In the brief time we have together this afternoon, I wish to address four policy areas: proposed inspection fees for meat and poultry, modernization of the nation's meat and poultry inspection system, research priorities at the Food Safety and Inspection Service, and the Market Promotion Program.

INSPECTION FEES

Once again this year, the Executive Branch is proposing inspection fees for a significant portion of meat and poultry inspection. Its proposal would require meat and poultry processors operating beyond one eight-hour shift to reimburse the government for the full cost of inspection activities. The Office of Management and Budget projects annual revenues of $104 million from these new fees. I would note that a similar proposal was presented in each of the past two years, the difference being that the present proposal is based upon 100% industry reimbursement, whereas the previous Administration suggested 50%.

This Subcommittee has historically, and correctly, taken the view that such fees cannot be imposed absent a change in the meat and poultry inspection authorizing statutes. We hope it will not deviate from that sound position now. In truth, the inspection fee proposal constitutes a startling about-face for a 90-year-old program whose sole concern is the health and safety of the American consumer.

The most basic responsibility of the federal government is to provide for the health and safety of the people. Meat and poultry inspection programs were designed to ensure public health, and in no way meant to provide economic benefit to production agriculture, the processing industry, or retailers.

The fee proposal amounts to an annual $104 million tax for a program required by law. The imposition of inspection fees would be costly to plant operators and could cause them to cut working hours -- a move that would place thousands of American jobs at risk. This new food safety tax -- for that is what it is -- will inevitably impose downward pressures on the prices livestock producers receive, and upward pressures on the prices consumers pay. An industry that every outside analyst agrees operates on paper thin margins in the best of times cannot, of itself, absorb

a financial blow of $520 million over the next five years. Think of it, Mr. Chairman: a half billion dollar burden forced onto one segment of the food industry, placing it at a tremendous cost and competitive disadvantage! Additionally, having industry pay inspector salaries -- even indirectly -- could create misleading, but nevertheless troublesome, impressions about the integrity of the government inspection process.

A primary goal of President Clinton's "A Vision of Change or America" is the creation of new jobs. Yet this inspection fee proposal will **cost** jobs. We estimate that nearly 80,000 American jobs are placed at risk by the inspection fee proposal-- most of them in the small, rural communities which can least afford such dislocation. Why would anyone accept an idea which, as part of a job creation proposal, actually puts people out of work?

Time precludes me from delving deeply into the many other downsides of this proposal. One particularly adverse effect would be upon exports, and few sectors of the American economy have so heartening an export story to tell as meat and poultry. In just six years, for example, red meat exports have increased 211%, and within the next few years will constitute the largest component of American agricultural exports. Penetrating overseas markets in competition with heavily-subsidized meat from the European Economic Community and elsewhere has not been easy, but it is being accomplished. To impose now, by fees, further costs upon high-quality U.S. meat and poultry exports would give our foreign competitors yet another advantage and simultaneously penalize one of our country's best-performing export products.

Not many people know, Mr. Chairman, that this experiment was tried once before. And it failed -- miserably. In 1947, Congress enacted a requirement that the meat industry pay the cost of inspection. It sounds so familiar: Congress was feeling the pinch, trying to cut the deficit after those frightfully expensive war years, and somebody -- I think it was before the glorious days of OMB -- propounded inspection fees. It sounded quick and easy and the deed was promptly done.

But do you know what the same Congress did just one year later, in 1948? Mr. Chairman, it repealed those fees. Reacting to the public outcry, Congress affirmed that "inspection is obviously for the benefit of consumers in general -- the public -- rather than for the benefit of processors or producers." And it concluded: "The cost of inspection should be paid out of the general funds of the Federal Government -- not only because inspection is a proper charge against the people as a whole, but because it is the only way in which consumers can be assured of effective, uncompromising inspection in which they can repose the fullest confidence." As somebody who worked in this great institution -- the Congress -- for 15 years, I am here to sound the tocsin to dissuade you from having to relive that very unpleasant moment in Congressional history.

Transcending the inspection fee proposal's heavy economic costs, its inherent inequity to an important national industry, its legal vulnerabilities and so on, is the overriding factor that an important principle is at stake in this debate -- one that the country would again regret sacrificing to the transitory whims of the numbers crunchers.

The General Accounting Office has said: "USDA's inspections of meat and poultry processing plant operations clearly provide broad public benefits; therefore, appropriations funding is appropriate."

Even the cost-cutting Grace Commission, which aggressively sought to eliminate government spending wherever possible, concluded that fees should not be charged for meat and poultry inspection. The Grace Commission said: "The government conducts many inspection and grading activities across a wide spectrum of products. Many, such as meat inspections, are mandatory and benefit the general public. Others, however, are voluntary (for example, meat grading...) and are performed by the government at the request of the user. The distinction between voluntary and mandatory activities should determine whether a user fee should apply."

Inspection is not, as in the case of meat grading, a service to the industry, nor is it voluntarily requested. Inspection is a mandated public health program designed for consumer protection. Broad-based public health and safety programs are not the appropriate vehicles for raising revenue. There is no more rationale for assessing inspection fees on meat and poultry than there is for assessing them on inspections for workplace safety, mine safety, nuclear safety, air and water compliance, or alcohol, tobacco and firearms.

Mr. Chairman, I know of NO consumer, producer, labor or industry organization, or any other public policy group, which supports this proposal. We urge its sound rejection, once again, by Congress.

INSPECTION MODERNIZATION

While our current system of meat and poultry inspection is generally considered the world's best, there is a pressing need to improve it. Almost no one is satisfied with the current system, perhaps least of all the industry that is forced to operate under it. The current system is mired in the techniques of the early 1900s, relying on physical inspection by sight, smell and touch, when in fact the real threat is microbial and chemical contamination that does not lend itself to traditional inspection procedures. Science beckons us to bring meat and poultry inspection into the 1990s.

We support the effort to make the current system better. But we want to emphasize the sense of urgency that we attach to the development of a new and better system. Developing the inspection system of the future is our highest priority at AMI. We are heartened that the new Administration has expressed its determination to build a new system, from the ground up -- a risk-based prevention strategy to identify and control critical points in the food production process, all the way from farm to table. The recent foodborne illness outbreak in the western United States, which resulted in the tragic deaths of three children, should bring home to us all the importance of implementing such a system. We urge this Subcommittee's support of the agency as it seeks to develop this new approach, and we pledge our continuing efforts as all interested parties come together to craft it.

RESEARCH PRIORITIES AT THE FOOD SAFETY AND INSPECTION SERVICE

In order for FSIS to succeed in its modernization mission, important research needs must be addressed. AMI has already communicated our sense of research priorities to the Subcommittee. These include research to determine the incidence of pathogens, including E. coli 0157:H7 and the causes of this pathogen's entry into the food system. AMI has also identified research priorities that focus on identification and prevention techniques at critical control points in the production and processing system. These projects include development of rapid detection methods for foodborne pathogens, irradiation, and additional projects on tanning research and turkey osteomyelitis.

AMI is convinced that the Food Safety and Inspection Service should have the capability to fund directly research that will promote meat and poultry safety. In its 1986 report evaluating meat and poultry inspection, the National Academy of Sciences cited "the lack of sufficient scientific and technical commitment from the research component of USDA" as a significant constraint upon movement toward an optimal inspection system. By charging FSIS with this new authority, the Congress would give focus to the research and development of new tools and methods to enhance consumer protection, with a minimum of bureaucracy and delay.

MARKET PROMOTION PROGRAM

Earlier, I mentioned the tremendous success story of meat and poultry exports, and I mentioned that, within a few years, meat and poultry exports will be our country's leading agricultural commodity going overseas. Value-added products are, as most of us know, the fastest-growing agricultural exports. Unfortunately, it is our competitors who are reaping the greatest rewards, with the European Economic Community commanding 50% of value-added global trade. As our competitors deploy every conceivable device

to enhance their market share, we should not set aside the one comparatively modest program that the United States has to encourage the growth of U.S. market share. While MPP is not, nor should it be, the complete response to America's export challenge, it is a critical piece of the mosaic. It has demonstrably enhanced our industry's competitive position in a number of critical overseas markets. The value of U.S. meat exports has increased over 110% since Targeted Export Assistance funding -- the precursor of MPP -- became available in 1986. Meat exports account for more than 135,000 jobs in the United States. In 1991, the last year for which the figures are all in, U.S. beef exports contributed $53.25 per head to the value of fed cattle, and pork exports added nearly $3 per head to the value of hogs at slaughter. Additionally, beef and pork exports represented over $330 million in corn and soybeans, in the form of high quality animal protein.

A final point on MPP: for purposes of the current GATT negotiations, MPP is considered a "green box," or sanctioned, trade program. To unilaterally forego a program which is effective, and whose legality is not being contested overseas, can only further disadvantage us in our trade negotiations. It would be the wrong signal at the wrong time for all the wrong reasons.

Mr. Chairman, we at AMI realize the difficult decisions confronting this Subcommittee. We are aware of the budgetary pressures at work that may very well affect the public health and safety needs of the American people. We stress to you that the public's faith and trust in the food supply hinges to a significant extent upon decisions this Subcommittee will have to make in the weeks just ahead. As you are about that arduous task, please know that we stand ready to share with you whatever information or expertise that we can. In the final analysis, your credibility and ours, in the eyes of the American people, are both on the line. I, for one, am convinced that we can strengthen that credibility by traveling down the road I have attempted to map today. Thank you again for the privilege of testifying here this afternoon.

BEEF CATTLE INDUSTRY

WITNESS

GARY WILSON, NATIONAL CATTLEMEN'S ASSOCIATION

Mr. DURBIN. Gary Wilson of the National Cattlemen's Association gets the dubious distinction of wrapping up this evening.

Mr. GARY WILSON. Thank you, Mr. Chairman. I will be brief, as well, and paraphrase the testimony that we provided to you. We will ask, though, that since the President's budget has not been released, if we would have the opportunity to review it and provide further, more detailed testimony at that time.

Mr. DURBIN. Certainly.

Mr. GARY WILSON. It would be greatly appreciated by NCA.

Four or five key issues that are important to the beef cattle industry that I would like to just briefly touch on this evening; that is, research supporting beef carcass evaluation and identification: Both you and Congressman Skeen know that the beef industry has identified carcass evaluation and genetic selection as top priority; and over the last two years, have been involved in three components, three specific research projects that will help the beef industry reduce fat in a product, reward the production in lean, and at the same time, maintain the taste qualities that consumers expect and deserve. To date, beef producers have provided over $1.6 million of their producer check-off dollars to these projects.

We would like to thank you, Mr. Chairman, and Congressman Skeen and other Members of this subcommittee that have also supported the projects through the congressional special grant over the last two fiscal years. That grant, as you well know, has totaled over $420,000. NCA is hopeful that the subcommittee members will continue to support the industry's research initiative to keep pace with the time and resources required to conduct the research. NCA asks that a special grant totaling $497,500 be allocated for fiscal year 1994.

Inspection user fees: Just go on the record that we, too, oppose the imposition of user fees for Federal meat inspection.

The Market Promotion Programs: We support the funding of the foreign market development cooperator program and the market promotion program. Exports of beef have been increased significantly in recent years to Japan, Korea, and Mexico. The U.S. Meat Export Federation has many effective market development and promotion programs in these countries, funded by Cooperator, MPP and private sector funds. Truly, beef exports continue to be a very successful component of U.S. trade. We hope that MPP will continue to receive adequate funding to maintain and improve that success story.

The Soil Conservation Service: NCA urges increased appropriations for range programs within the Soil Conservation Service. The Nation's cattlemen find it ironic that, given the current political and social debate over livestock grazing of private and public lands, SCS, because of inadequate funding and other priorities, is forced to pull manpower and resources from range and grassland programs. During the past year, at the request of many landowners, and particularly NCA members, the Grazing Land Conservation

Initiative was developed to promote voluntary land owner initiative efforts across the country which protect and improve the productive capacity of America's private grazing lands. The Grazing Land Conservation Initiative was developed as a cooperative program among landowners, conservation districts, producer groups, and SCS to facilitate information exchange. In order to accomplish these benefits, we ask that GLCI receive line item funding in the USDA/SCS budget, hire personnel trained in pasture and range management, and provide qualified and technical assistance to landowners at their request.

The Animal Plant Health Inspection Service: Brucellosis, as you well know, is on the verge of being eradicated. We hope the funding for that program, a very successful program, will continue, and that we won't stop too short of finalizing the eradication of that disease.

Tuberculosis: Tuberculosis currently presents a problem in the increasing incidence of Mexican cattle being imported into the U.S. We have a growing incidence of TB in farmed cervidae in this country. We need additional funding to support research and development of diagnostics and controls for tuberculosis.

Food Safety Inspection Service: NCA is very supportive of meat inspection reform and research needed to make it a reality. We applaud Secretary Espy's initiative to establish a meat inspection system based on scientific analysis of animal disease, chemical and microbiological contamination, and using the hazard analysis of critical control point concepts and risk analysis.

This concludes our statement. Thank you, Mr. Chairman.

Mr. DURBIN. Thank you very much, Mr. Wilson, for an excellent statement that really touched on a number of important issues very succinctly.

I would just encourage you and the members of your association to join us in defending ag research when critics start their chant that this is totally unnecessary and a waste of money and pork barrel and all the other things we hear about it. You know as well as I do how important it is to your industry, and we want to make sure that those who benefit from it and know of its importance will join us in letting the rest of the country know as well.

Mr. GARY WILSON. We will, Mr. Chairman. We want you to know how much we greatly appreciate the efforts of this subcommittee, and on our behalf and all of the livestock industry.

Mr. DURBIN. Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Wilson. I will second the sentiments from the Chairman. Those who whoop and holler about pork barrel as far as agriculture research is concerned, is about the closest proximity they ever come to agriculture. Thank you for your comments.

Mr. DURBIN. Thanks, Mr. Wilson, for your patience.

I want to thank my Minority spokesman here for his diligence and perseverance.

Mr. SKEEN. I want to thank my Chairman for letting me flit in and out of here.

[The information follows:]

NATIONAL CATTLEMEN'S ASSOCIATION
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Statement

on Behalf of the

NATIONAL CATTLEMEN'S ASSOCIATION

Regarding

USDA - 1994 BUDGET

Before the

AGRICULTURE, RURAL DEVELOPMENT AND RELATED AGENCIES SUBCOMMITTEE OF THE

HOUSE APPROPRIATIONS COMMITTEE

Submitted by

Gary Wilson, Director
Animal Health/Inspection,
Food Policy and Research

NATIONAL CATTLEMEN'S ASSOCIATION

April 1, 1993

The National Cattlemen's Association is the national spokesman for all segments of the beef cattle industry -- including cattle breeders, producers, and feeders. The NCA represents approximately 230,000 cattlemen. Membership includes individual members as well as 46 affiliated state cattle associations and 29 breed associations.

Good evening, Mr. Chairman and members of the Subcommittee, my name is Gary Wilson and I am Director of Animal Health/Inspection, Food Policy and Research for the National Cattlemen's Association.

Today, I would like to highlight a few key issues of importance to the beef cattle industry as a partial response to the proposed budget. Since the FY 94, budget will not be released until next week, NCA respectfully requests an opportunity to submit a more detailed response to the budget at a later date.

Special Grant: Beef Carcass Evaluation and Identification: The beef cattle industry has identified beef carcass evaluation and genetic selection as top research priorities. Last week, producers representing NCA and the Beef Industry Council voted to continue to provide industry support (check-off dollars) for these projects during FY 94. They also asked that I extend their thanks to you, Mr. Chairman and the members of this subcommittee, for awarding the Congressional Special Grant: Beef Carcass Evaluation and Identification during FY 92 and FY 93 to support these projects.

To date, beef producers have provided $1.6 million of industry check-off dollars to support the three research components of this Special Grant: The Development of the Instrument Assessment of Carcass Characteristics: The Identification of Major Genes Effecting Carcass Quality: The Development of Carcass Trait Information on Live Yearling Breeding Bulls. The FY 92 and FY 93 Special Grant awarded by this Subcommittee has provided $420,000.00 NCA is hopeful, Mr. Chairman, that you and your Subcommittee members will continue to support the industry's research initiative. To keep pace with the time and resources required to conduct the research, NCA asks that a Special Grant totalling $497,500.00 be allocated for FY 94.

Inspection User Fees: NCA opposes the imposition of user fees for federal meat inspection programs. We contend that programs mandated by law to be conducted on behalf of the public benefit should be funded with public monies. Packing plants that traditionally incorporate an eight hour, second scheduled, approved shift (which not only improves production efficiency and competitiveness, but also creates jobs) should not be subject to pay the cost of inspection services.

Market Promotion Programs: NCA recognizes the many good programs undertaken by the FAS that enhance our ability to export our products.

We support the funding of the Foreign Market Development Cooperator Program and the Market Promotion Program (MPP). The beef industry has been a beneficiary of these programs through the U.S. Meat Export Federation (USMEF). Exports of beef have increased significantly in recent years to Japan, Korea, and Mexico. The USMEF has many effective market development and promotion programs in these countries, funded by Cooperator, MPP and private sector funds. Truly, beef exports continue to be a very successful component of U.S. trade. Continued enhancement of MPP will help us maintain/improve that success story.

Soil Conservation Service: NCA urges increased appropriations for range programs within the Soil Conservation Service (SCS). The nation's cattlemen find it ironic that given the current political and social debate over livestock grazing of private and public lands, SCS because of inadequate funding, is forced to pull manpower and resources from range and grassland programs. Over half of the U.S. land mass is used as pasture or range. The private landowners who graze livestock on these lands need and deserve the conservation assistance of SCS.

During the past year at numerous landowner requests, a Grazing Lands Conservation Initiative (GLCI) was developed to promote voluntary, landowner initiated efforts across the country which protect and improve the productive capacity of America's private grazing lands. It is recommended that the technical assistance necessary to achieve these goals should continue to be delivered, at the landowner's request, by the USDA/Soil Conservation Service.

The GLCI was developed as a cooperative program among landowners, conservation districts, producer groups and SCS to facilitate information exchange by:

-Strengthening partnerships between producers and others;
-Promoting voluntary action and respecting private property rights;
-Encouraging diversification to achieve multiple natural resource benefits; and
-Emphasizing training, education and increased public awareness.

In order to accomplish these benefits, the GLCI should 1) receive line-item funding in the USDA/SCS budget, 2) hire personnel trained in pasture and range management, and 3) provide qualified technical assistance to landowners at their request.

Animal Plant Health Inspection Service:

*Brucellosis - We are pleased with the significant progress that is occurring with the Brucellosis eradication program. It is important to maintain current funding to complete the brucellosis eradication program and the last vestiges of this disease, we must not become complacent.

*Tuberculosis - The increasing incidence of TB infected cattle being imported into U.S. from Mexico and growing TB infestations in farmed cervidae, highlight the need for funding that will support research and development of improved diagnostics and control mechanisms for TB. As APHIS moves forward on eradicating TB, we must provide adequate funding to be successful.

Food Safety Inspection Service:

NCA is very supportive of meat inspection reform and the research needed to make it a reality. We applaud Secretary Espy's initiative to establish a meat inspection system based on scientific analysis and includes the Hazard Analysis of Critical Control Points (HACCP) concept and risk analysis. This concludes our statement.

Thank you.

67-181 O—93——25

STATEMENT OF THE NATIONAL POTATO COUNCIL

Mr. DURBIN. At this point in the record we will insert the statement of the National Potato Council.

[The statement follows:]

BEFORE THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FDA, AND RELATED AGENCIES OF THE HOUSE COMMITTEE ON APPROPRIATIONS

THE NATIONAL POTATO RESEARCH PROPOSAL

STATEMENT OF THE NATIONAL POTATO COUNCIL

Good morning Mr. Chairman and Members of the Subcommittee. My name is Bob Walther. I am a potato farmer from Michigan and current Vice President for Government Relations for the National Potato Council (NPC). On behalf of the Council, we thank you for your assistance for funding part of our National Research Proposal and we look forward to working with you to expand the funding in Fiscal Year 1994. We believe that increased funding of 300,000 specifically for varietal development is important and would allow for the continued development of critical research.

The National Potato Council (NPC) is a national trade association representing approximately 13,000 potato growers in thirty-eight (38) states. Our growers produce both seed potatoes and potatoes for consumption in a variety of forms. Annual production in 1991 averaged 418 million hundredweight with a farm value of $2 billion. Total value is substantially increased through processing. The potato crop clearly has a positive impact on the U.S. economy.

The potato is the most popular of all vegetables grown in the United States. Annual per capita consumption is 126.2 pounds in 1989, up from 107 pounds in 1962, and is increasing due to the advent of new products and heightened public awareness of the potato's excellent nutritional value. Per capita consumption of processed potatoes increased dramatically from 57.0 pounds in 1970 to 76.4 pounds in 1989. Potatoes are considered a stable consumer commodity and an integral, delicious component of the American diet.

Potatoes are the number one vegetable grown and consumed in the world. In 1986, the U.S. exported 155,028 metric tons of potatoes or potato products. In 1991 we exported 412,853 metric tons, a 266% increase. These research funds will help assure that quality potatoes and potato products can continue to be exported.

The potato crop has been traditionally controlled by supply and demand in a free market. Government support programs such as price-guarantees and acreage set asides have not been necessary. However, potato growers recognize that, in order to remain a viable and competitive industry, we must constantly strive to improve production efficiency and market quality. Through carefully planned research, we believe we can continue to offer an excellent high value product and maintain a viable and competitive U.S. industry in the United States.

The National Potato Council research program is a unique program working to attack and solve certain national problems in the potato industry. The Agricultural Research Service (ARS), State University Scientists and potato growers from around the nation all participate in guiding these research programs to assure that the funds are effectively used in a priority manner and that duplication does not occur.

As you will recall, the National Potato Research Proposal was the culmination of an intensive effort begun in 1984 between the NPC and the ARS to identify national priority research issues of concern to the potato industry. Based on these identifiable research needs, the National Potato Research Proposal received initial funding for ring rot diseases; early dying disease; marketing; aphids; potato beetle and varietal development.

The monies received by the ARS have been greatly appreciated and the potato growers are starting to see some results from this research program. We are getting feedback on research results back to the producer by having researchers speak at seminars and by making available to the potato industry a written summary of all research underway. A copy of the latest summary has been provided to the Subcommittee.

This year additional funding of $300,000 in Varietal Development is needed and would be effectively utilized.

Success demands quality. Effective timely research keeps our products competitive.

It is important to note that representatives of the NPC have held annual meetings with ARS officials, the most recent in December of 1992, to discuss the distribution of research funds. The NPC is particularly pleased with the tremendous efforts put forth by ARS to ensure that the research conducted is meaningful and addresses industry problems in the most thorough, expeditious and cost effective manner. The NPC looks forward to continuing its close partnership with ARS to maximize the use of these important funds as this Subcommittee has directed.

The NPC has become deeply involved with and impacted by various environmental issues, including concerns over groundwater and chemical safety. We feel that our growers make every attempt to apply chemicals safely and well within Environmental Protection Agency requirements. However, we anticipate further restrictions on the use of chemicals and even the loss of some existing products. For example, the potato beetle has become an increasingly troublesome pest in many production areas and is spreading rapidly. Many production areas face increased virus and fungal diseases as well. Research is therefore even more critical given the rapid spread of these pests and diseases and the concerns over chemical use. Ultimately, it will only be possible to overcome our dependence on chemicals through plant variety breeding and use of genetic engineering approaches. This is why increased funding of varietal development research is of particular importance. Plant breeding will not only help develop improved potato varieties with resistance to insects, diseases, nematodes, and environmental stress factors, but it will also allow development of varieties with improved nutritional and market quality.

Until we achieve success in variety development research, we need to find an effective alternative for CIPC which controls sprouting in storage and retail outlet stores and is also essential for the export market. Although EPA re-registration is proceeding on CIPC, there are no other alternatives available for sprout control. The growers in the past few years lost the use of several key pesticides that were crucial in controlling blight, potato beetle, whitefly, Fusarium dry rot and weeds. Growers and researchers alike are becoming extremely alarmed at the resistance to the few remaining registered products still left on the market. Varietal development is a key to the success of our industry. Research must be accelerated to develop pest resistance varieties which would reduce use of pesticides. Biotechnology research must also be accelerated.

The NPC will continue to work closely with USDA to oversee this research and will report periodically to the Congress on the progress of the research. We sincerely thank your Subcommittee for its generous support of this vitally important research. We would be happy to answer any questions you might have. .

TUESDAY, APRIL 20, 1993.

WATER AND SEWER GRANTS

WITNESSES

WILLIE J. DAVIS, MAYOR, CITY OF VIENNA, GA
STANLEY GAMBRELL, ADMINISTRATOR, CITY OF VIENNA, GA

Mr. DURBIN. Welcome to this meeting of the subcommittee. We will commence with Ralph De Gennaro, Friends of the Earth. If he is here.

And if he is not, Mayor Willie Davis of the City of Vienna, Georgia, together with Stanley Gambrell. Please join us here.

You know, in Illinois, we pronounce that VI-ANNA. Can you believe that?

Mr. GAMBRELL. We do.

Mr. DURBIN. Oh, you, too?

Mr. GAMBRELL. We say VI-ANNA.

Mr. DURBIN. VI-ANNA. All right. Please proceed.

Mr. DAVIS. Mr. Chairman and members of the subcommittee, my name is Willie Davis. I am the mayor of Vienna, Georgia. With me is Mr. Stanley Gambrell, the city administrator. We want to thank you for allowing us to be here today.

We are here to ask for your support on a project which is, in my opinion, could have the same impact on our area as that the 1996 Olympics will have on Atlanta and the state of Georgia.

I am going to ask Mr. Gambrell to talk with you about what we are here for, and we ask that you accept our written statement to be entered into the record.

Mr. DURBIN. Mayor, your statement will be entered in its entirety and, at this point, Mr. Gambrell, if you would like to testify, you are welcome.

Mr. GAMBRELL. Mr. Chairman and members, thank you.

Vienna is the county seat of Dooly County. Dooly County is one of the poorest counties in the state of Georgia. We have high unemployment rates, a high percentage of poverty. Over 60 percent of our citizens are on fixed income. We have low educational levels and we have low per capita income.

We now have an opportunity to improve our situation. Cargill, Inc. will locate a plant in Vienna creating 1000 new jobs. These will be permanent, full-time jobs with a payroll of $14 million.

To provide for this facility, we must build a new water and wastewater facility. The expected cost of this project is $6.5 million. We need your help and we are seeking a federal grant for $3 million to help offset this cost.

We hope you will consider our request and help the citizens of Dooly County.

Mr. DURBIN. Thank you, sir. Let me ask you a couple of questions.

Whose congressional district would this be in?

Mr. GAMBRELL. We have two, J. Roy Rowland and Sanford Bishop.

Mr. DURBIN. Okay.

Mr. GAMBRELL. The project it is self will be in J. Roy Rowland's. Most of Vienna is in Sanford Bishop's district.

Mr. DURBIN. Okay. Now, have you pursued this with any other federal agencies for assistance such as the Farmers Home Administration or the REA?

Mr. GAMBRELL. Yes, sir. We have applied for an ADA grant. We had hoped because of our high percentage of poverty that we would qualify for an 80 percent grant. Because of budget restrictions and other federal requirements, we are only going to be able to get about $2 million from ADA and that necessitates our being here asking for another $3 million.

Mr. DURBIN. Two million out of the six and a half total?

Mr. GAMBRELL. Yes, sir. We have applied for some state monies and also some Farmers Home money.

Mr. DURBIN. Okay. Now, there is some money in the stimulus package but that, I think, is spoken for.

Is that not all pending applications waiting for funding?

Mr. GAMBRELL. Mr. Chairman, this project is ready to go now. In fact, we are about 30 days behind on construction. We have had some wet weather in Dooly County.

Mr. DURBIN. You started the construction before you got the money?

Mr. GAMBRELL. No, sir. But we are ready to start.

Mr. DURBIN. Any day.

Mr. GAMBRELL. We can put 200 people to work within a month on construction and when it is completed employ 1000.

Mr. DURBIN. Would this project serve anything other than the Cargill plant?

Mr. GAMBRELL. Yes, sir.

Mr. DURBIN. Would it provide sewage treatment facilities for the community?

Mr. DAVIS. It will extend our existing infrastructure.

Mr. DURBIN. I see.

Mr. GAMBRELL. Redcap Industries is also located near the site. They plan on employing some extra folks and it will also serve them. And it will open up about two or 300 acres for potential development.

Mr. DURBIN. Okay. Well, let me do this: I will be in touch with both Congressman Rowland and Congressman Bishop to talk about this and see what we might be able to do.

I will tell you in all candor that I do not know that we have funded anything quite like this in the past. I represent a rural area and I know what you are talking about. If you are going to get the jobs that you need, you have got to have the infrastructure and it becomes very difficult in a poor area to raise the money through property taxes and the like because people are generally in pretty sorry shape and cannot afford to pay a lot more and that is why they need the jobs. It is kind of a vicious circle.

Mr. GAMBRELL. Mr. Chairman, we are in that part of the state known as the other Georgia.

Mr. DURBIN. Now, where is it in the state of Georgia? Where are you?

Mr. GAMBRELL. Southwest.

Mr. DURBIN. The southwest.

Mr. GAMBRELL. The southwest part of the state. There are seven counties that will comprise our job market. Out of those seven, about four of them are on this poorest county in the state list.

Mr. DURBIN. All right.

Mr. GAMBRELL. And we will draw our labor market from that seven-county area. It is not only for Vienna and Dooly County, it is going to be the biggest project in southwest Georgia that we have had the opportunity in a long time.

Mr. DURBIN. All right.

Mr. Skeen?

Mr. SKEEN. Just one question. And I appreciate your concerns. I represent principally a rural community in southern New Mexico.

What kind of help are you getting from the state?

Mr. GAMBRELL. We have received $600,000, two grants, the maximum amount that the state has. We received a $400,000 community development block grant and a $200,000 employment incentive program, EIP grant.

Mr. SKEEN. So you have $1.2 million from state sources.

Mr. GAMBRELL. Six hundred thousand from the state.

Mr. SKEEN. Six hundred, 400 and 200.

Mr. GAMBRELL. Six hundred thousand and 400,000.

Mr. SKEEN. From both sources, that is 1.2 million and you need a total of what?

Mr. GAMBRELL. Six and a half.

Mr. SKEEN. Six and a half?

Mr. GAMBRELL. Yes, sir.

Mr. SKEEN. Thank you.

Thank you, Mr. Chairman.

Mr. DURBIN. Thank you very much. I will be in touch with Congressman Rowland and Congressman Bishop.

Mr. DAVIS. Thank you, Mr. Chairman.

Mr. GAMBRELL. They are both supporters of this project.

Mr. DURBIN. I am sure they are and maybe can find some sources for you that you have not come across yet. We will help them look.

Mr. GAMBRELL. Thank you very much.

Mr. SKEEN. You have had a lot of rain?

Mr. GAMBRELL. Yes, sir.

Mr. SKEEN. Well, that solves your water problem for a little while.

Mr. GAMBRELL. Yes, sir. We are having a hard time getting planted now.

Mr. SKEEN. Well, I bet you are. Thank you.

Mr. GAMBRELL. Thank you, Mr. Chairman.

[The prepared statement follows:]

City of Vienna

VIENNA, GEORGIA 31092

TESTIMONY OF
STANLEY GAMBRELL
ADMINISTRATOR
BEFORE THE
SUBCOMMITTEE ON AGRICULTURE AND RURAL DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES
APRIL 20, 1993

Mr. Chairman, Members of the Subcommittee, my name is Stanley Gambrell and I am the City Administrator of Vienna, Georgia, the County seat of Dooly County. With me is Willie J. Davis, Mayor of Vienna. For those of you who are not familiar with the geography of Georgia, Dooly County is in the middle of the state, in an agricultural region sometimes called "the other Georgia" in contrast to the more affluent Atlanta area. Thank you for providing me the opportunity to testify before the Subcommittee to request your assistance in securing the necessary funds for water and waste treatment infrastructure improvements critical to economic development in our region.

Background on Vienna and Dooly County

Population: The population of Dooly County has been declining steadily since the period between 1910 and 1920 when the cotton boll weevil invaded the land and our agriculture-based economy began its long downward spiral. According to the U.S. Census of 1910, Dooly County had 20,554 residents in that year; the 1990 census shows Dooly County having only 9,901 residents, a loss of 10,653 persons or 52 percent during that period. The loss from 1980 to 1990 alone was 8.5 percent.

Education: The 1980 Census showed that the education levels of Dooly County residents 25 years of age and older were significantly below state averages. Over a third (39.3%) of Dooly County's age 25+ population had fewer than 8 years of formal education. This is over 1.68 times the State average of 23.7 percent. In addition, almost two-thirds (66%) had failed to complete high school. This is 1.5 times (50% higher) the state rate of 44 percent. Furthermore, only 8 percent had a bachelor's degree or higher, as compared with 15 percent for the State.

Income: According to the 1980 U.S. Census, 34 percent of the residents of Dooly County were living below the poverty line. As such, Dooly had the 6th highest percentage of any of Georgia's 159 counties. In addition, data from 1989 on percent of households receiving Federal Aid for Families with Dependent Children (AFDC) payments shows that Dooly and the surrounding counties continue to rank far above the state average. A good indicator of how Dooly County's income levels compare to national income levels are the per capita income figures for 1988 provided by the Commerce Department's Bureau of Economic Analysis: according to the Commerce Department's figures, Dooly County residents had an average income of $11,995.00 per year, only 72.7 percent of the national average.

Unemployment: Dooly County suffers from a growing shortage of job opportunities, resulting in increasing unemployment levels. In fact, according to unemployment statistics compiled by the Georgia Department of Labor, between July 1991 and July

1992, the unemployment rate in Dooly County rose from 5.6 percent to 8.5 percent. The annual unemployment rates for the seven counties that comprise the Vienna Labor Market Area are equally high, ranging from 1.22 to 2.00 times the State average in 1991.

Plan for Economic Revitalization

In order to improve their economic status, Dooly County residents, and the residents of the surrounding seven county Labor Market Area are in desperate need of long-term employment opportunities that are in-line with their education and skill levels and provide adequate salaries.

In response to this need, the City of Vienna has been successful in negotiating an agreement under which Cargill, Inc. will undertake a $35 million expansion of its poultry operations in the Middle Georgia area. The largest element in this plan is a new $22 million poultry processing plant to be located in Vienna. This plant will provide jobs for 450 to 500 employees in the short-term, and up to 1,000 permanent full-time employees when the plan reaches full production. The yearly payroll for these employees is expected to be $14 million.

Projected Economic Impact: The completion of the proposed project will directly and substantially impact the economic condition of the low- and moderate-income residents of Vienna, Dooly County, and the surrounding seven-county Labor Market Area. In fact, while Cargill is committed to hiring at least 50 percent low- and moderate-income persons, their track record at a nearby

plant has been much higher. There, almost 98 percent of the new employees were of low- and moderate-income at the time of their hiring.

Further, this positive impact will be widespread. Based upon the commuting patterns for this plant and the geographic situation in and around Vienna, it is expected that somewhat over half of the new employees will come from Vienna and Dooly County, with the balance coming from the surrounding counties.

Project Elements: In order to accommodate the physical needs of the plant, the City of Vienna will be required to make major improvements to several of its infrastructure systems as part of this project. In particular, because Cargill's planned poultry processing plant will be a large user of water, and generator of wastewater, the most critical infrastructure improvement that must be undertaken is the construction of a water and wastewater treatment facility. Construction of this facility is expected to cost about $6.5 million, and include the following components:

1. Two new 1200 gpm. deep well with chemical feed building
2. a 400,000 gallon elevated water storage tank
3. ±7,000 LF of 12" water main
4. ±7,000 LF of gravity sewer collection line
5. a 2,000 GPM sewage transfer pumping station with bar screen
6. ±2,000 LF of 12" sewer force main
7. a 1.2 MGD "preliminary" sewage treatment system
8. a 1.2 MGD "secondary" land treatment irrigation system
9. ±10,000 LF of 6" steel natural gas line
10. acquisition of ±310 acres of land.

Request for Federal Support

The City of Vienna is exploring a diverse variety of funding sources in order to raise the funds required to construct this water and waste treatment facility, including a local bond issuance and the pursuit state community development funds. We understand that this Subcommittee has recognized the significant need for economic revitalization efforts in the nation's rural areas, and has provided support for projects of this nature through the "rural development grants" and "rural water and waste disposal grants" sections of your Appropriations Bill, as authorized by the Rural Development Act.

It is our hope that a Federal grant in the amount of $3 million dollar will be provided for these water and sewer infrastructure improvements by your Subcommittee under this or another appropriate section of your bill. Combined with the $35 million commitment of private funds by Cargill, Inc., this Federal grant will insure the success of an economic development project with the potential to directly and substantially improve the economic condition of low- and moderate-income individuals in this region, creating 1,000 permanent jobs once it is completed.

We do not consider this a "hand out" but rather a "lift up" for our community and the seven county area that surrounds us. We hope you will consider this proposal -- and the dramatic return it promises in terms of permanent jobs -- favorably in your FY94 bill. Finally, we thank you, again, for allowing us to come before the Subcommittee today.

AGRICULTURAL DEVELOPMENT IN THE AMERICAN PACIFIC

WITNESS

HON. ENI F.H. FALEOMAVAEGA, A DELEGATE TO CONGRESS FROM AMERICAN SAMOA

Mr. DURBIN. A long way from Vienna, Georgia and Washington, from American Samoa, our colleague, Mr. Faleomavaega. Please join us at the table and your statement will be made part of the record.

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman. I appreciate again the opportunity of appearing before the subcommittee on behalf of the agricultural project for the American Pacific region.

I am going to dispense with my statement, Mr. Chairman. I would like to briefly mention some of the pressing agricultural needs in the American Pacific region.

First, we respectfully ask for your continuing support by at least maintaining the current funding level of $650,000, as we had for the last five years, for the five land grant projects in the state of Hawaii, the Federated States of Micronesia and the territories of Guam, American Samoa and also the Northern Mariana Islands.

Mr. Chairman, I think in terms of distances, the five land grant institutions in the Pacific are spread out over an area larger than the continental United States and it has been a very difficult situation. I am pleased that this project is beginning to address the myriad of agricultural problems that now exit in the region through its existing network. The fact is that these land grant institutions have just been operating within the last decade. Of course, the University of Hawaii has been the primary sponsor since the early 1900s and had provided some assistance through its resources.

I want to express my sincere gratitude to the members of the committee for your support in this effort in the last five years by setting up ADAP projects for these different areas.

Unlike most of our land grant institutions which are within the continental United States, Mr. Chairman, we talk about the distances of these areas. Between Guam and the state of Hawaii as well as in American Samoa, we are talking about almost the whole continental United States.

One of the areas of concern, of course, is farming programs. Basically we are still on a subsistence level. We do not have commercial farming as it is true in most of the states but we are very grateful that we have this opportunity to work together in the form of collaboration among the different jurisdictions that currently have these land grant institutions. So that basically, Mr. Chairman, is what I wanted to share with you this morning.

I would be very happy to entertain any questions from the members of the committee.

Mr. DURBIN. We were trying to establish what the funding level was on this.

Mr. FALEOMAVAEGA. It was $650,000 last year, Mr. Chairman. Yes. So we are not requesting any additional funding. Considering

the budgetary constraints, we think that this program could well function at at least the current level.

Mr. DURBIN. Okay.

Mr. Skeen?

Mr. SKEEN. I have no questions.

Mr. FALEOMAVAEGA. Thank you.

Mr. DURBIN. Thank you very much for joining us.

Mr. FALEOMAVAEGA. Thank you very much, Mr. Chairman. I wish all the hearings were like this.

Mr. DURBIN. Thank you.

[The prepared statement follows:]

STATEMENT OF
THE HONORABLE ENI F. H. FALEOMAVAEGA
BEFORE THE HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON RURAL DEVELOPMENT,
AGRICULTURE AND RELATED AGENCIES

April 20, 1993

Mr. Chairman and members of the Subcommittee: Thank you for the opportunity to appear before your Committee on behalf of the land grant directors in the American Pacific to request your continued support of this important regional program. Today, I will share with you the accomplishments which have taken place in American Samoa, Hawaii, Northern Marianas, Guam, and in the Freely Associated States of Micronesia as a result of the Agricultural Development in the American Pacific (ADAP) project.

This past year, 1992, was a pivotal year for the project with an evaluation of our experiences over the first four years and the development of a strategic plan for the next five years. The American Pacific land grant directors initiated this process to build upon the enthusiasm and working relationships among Pacific land grant personnel and to channel this collaborative energy into more focused programs. In the first four years of this program, ADAP has convincingly demonstrated that a mutually empowering network among the five land grant institutions in the

Pacific is not only possible but productive. Given this, the directors have invested in long range planning to ensure future effectiveness of the collaborative network created.

With the help of two experienced resource people from the region and two from the U.S. Department of Agriculture, the Directors conducted an intensive evaluation of client and in-house needs, analyzed the lessons learned from the first four years of working together, and generated a five-year strategic plan. This plan was finalized in August of 1992.

Mr. Chairman, ADAP's mission statement is to serve as "a mechanism to address common regional client-based issues while maintaining the cultural, social, economic, and environmental integrity of the region". While there were several goals and objectives developed during the planning process, the one overriding goal was to develop sustainable agricultural production with a focus on local health, nutrition, and food safety.

I am pleased that the accomplishments during the past year have already started to reflect client-based projects. Two examples are illustrative of the activities during the past year. First, there is a continued emphasis on developing the land grant faculty and staff. These individuals along with the agricultural community are the hope for the future agricultural development in

the region. This is especially the case since many of the land-grant institutions in question are very young: some were created as late as the 1980's. Toward this end, the programs in American Samoa and the Northern Marianas have articulated courses with the University of Hawaii, the oldest and most established of the institutions in the region. In addition, the staff in the region has developed considerable expertise in the area of biological control of pests, and they were major participants in a Pacific-wide symposium on biological control. Prior to the creation of this program, neither would have occurred.

Secondly, the land grant staff in the region has conclusively confirmed the effectiveness of a specific parasite to control a leaf-footed insect that has plagued the production of melon-type crops in the region. Farmers on Guam and Pohnpei, for example, have reported healthier and less misshapen fruit in their cucumber crops as a result of use of these parasites. These solutions to long-standing problems are both cost-effective and environmentally sound.

Thirdly, in response to a need to develop low cost methods of increasing agricultural developments, land grant staff have developed demonstration sites in Guam, Saipan, and American Samoa to show farmers how to use trees along with crop production. It has been shown that trees not only have value as fuel but also provide windbreaks for crops, prevent soil erosion, and produce

nitrogen in the soil for use by food crops. These demonstrations are vivid examples of development of sustainable agricultural resources of the region.

Mr. Chairman, I am pleased that the land grant directors in the American Pacific have clearly demonstrated that they can work together for the common good of the region. They have shown that in addressing regional problems, they can minimize the duplication of effort and overcome the tremendous barriers of distance and sparsely populated areas. Even so, the real test of collaboration will be during the next several years. They are faced with the unenviable task of continuing to build the capacities of their relatively infant institutions, addressing the myriad of problems facing a 12-month agricultural projects spread out over an area larger than the continental United States, generating practical information through an effective applied research program, and transferring this information to their clientele. These are far from trivial tasks.

I urge you, Mr. Chairman and distinguished members of this Committee, to continue your support of this program by ensuring that funding for this critically-needed agricultural project is retained for the next fiscal year at at least the current level.

Thank you.

AGRICULTURAL PROGRAMS

WITNESS

JERRY CALVANI, NATIONAL COTTON COUNCIL OF AMERICA

Mr. DURBIN. Mr. Jerry Calvani, National Cotton Council.

Mr. SKEEN. Mr. Chairman, this is one of my constituents and I recommend him wholeheartedly.

Mr. DURBIN. This man looks very familiar to me.

Good to see you again.

Mr. SKEEN. I think we had dinner with him not so long ago.

Mr. DURBIN. That is right.

Mr. CALVANI. We did. We had a good dinner.

Mr. DURBIN. Mr. Calvani, your statement will be made part of the record in its entirety and if you would like to give us the highlights, we would appreciate it.

Mr. CALVANI. Okay. Thank you very much, Mr. Chairman.

Distinguished members of this committee, it is a privilege to be here before this subcommittee to discuss the cotton industry's priorities for funding and programs under this subcommittee's jurisdiction.

I am Jerry Calvani, a producer from Carlsbad, New Mexico, and chairman of the National Cotton Council's Board of Directors.

Mr. Chairman, we know that Congress must make some difficult choices about the allocation of resources. Since 1987, the number of agriculture scientists have been reduced by 20 percent and the current budget resolutions would result in an additional 6 percent attrition in staff for agricultural research through 1998.

We feel strongly that research, extension and action program funding is a competitive necessity representing a sound national investment. This will be even more true if GATT, NAFTA and subsequent international trade agreements substantially liberalize trade as expected.

I will address a few specifics for fiscal year 1994 and refer you to my written statement for additional details.

Under the administration's proposed budget, ARS, CSRS and Extension Service are essentially level funded. Except for special initiatives support for traditional ag research in extension programs has declined dramatically in recent years. We will continue to communicate our high priority needs to federal and state research agencies. However, the following requests cannot be met with existing funds and deserves special considerations.

For several years, we have voiced alarm about the impending crisis caused by the sweetpotato whitefly. Potential losses from this pest are of disaster proportion and cotton's markets are threatened because of insect sugar which makes cotton unsuitable for spinning.

Growers in Arizona have been particularly hard hit in recent years and our domestic customers are beginning to refuse to accept cotton grown areas with whitefly infestation.

A.R.S. needs an increase of $1.9 million in fiscal year 1994 to bring funding for all crops to $3.7 million. We support the CSRS request for $7 million for an IPM special grant and favor APHIS's request for whitefly action funds.

We urge all agencies to coordinate their efforts with a national resource and action plan for the whitefly and we need assistance to ensure EPA will register chemicals proven to be effective in controlling whitefly until long term research yields results.

Cotton's continued competitiveness depends not only on efficient production and marketing but on efficiencies and value added processes as well.

We request an increase of $1.5 million in the ARS budget for labs in New Orleans and Clemson, South Carolina. Funds will be used to solve stickiness problems, improve fabric durability, development measurement technology for fiber spinning utility and eliminate dye defects.

Action programs carried out by APHIS are essential to effective marketing and crop protection. We request $13.6 million for APHIS's share of boll weevil eradication and suppression programs. This industry-government coordinated effort has proven environmentally and economically sound as evidenced by areas where pesticide usage has been reduced by 70 percent, production costs have declined and entire communities have been revitalized.

Funds will be used in the Texas-Oklahoma High Plains Boll Weevil Containment Program and for areas in Arizona, Southern California and the southeast. Requested funds will permit expansion of the eradication program in Northern Alabama and middle Tennessee.

We request $2.623 million for APHIS pink bollworm action programs. These funds would continue support of sterile pink bollworm moth releases in California's San Joaquin Valley and initiate a trial suppression program on up to 20,000 acres in heavily infested areas. Such programs are essential for agriculture to reduce its reliance upon chemicals.

Since an average of 40 percent of our annual production and a significant percentage of cotton produced in western states is exported, the cotton industry strongly supports adequate funding for USDA's Foreign Agriculture Service, the foreign market development and market promotion programs, and other export programs including PL–480 and GSM–102.

Since cotton is an effective marketing alone program, we do not use EEP. We urge funding for MPP to be approved at not less than the levels for fiscal year 1993. We continue to be concerned that successful programs like our program with the Gunse Company of Japan are the subject of inaccurate criticism. Our industry uses MPP to develop and maintain important markets for U.S. cotton. We face highly subsidized competition from Central Asian republics of the Former Soviet Union, the People's Republic of China and Pakistan.

M.P.P., FMD and GSM are all important elements of our industry's ability to compete and under a GATT agreement these programs may ultimately form the basis of future foreign policy.

We also urge the authorization of the continued use of Section 32 funds for the cotton seed oil assistance program as authorized in the 1990 farm bill.

Mr. Chairman, I would be remiss not to mention one very important issue for our industry. Recently we were concerned to read reports that this subcommittee might consider means testing agricul-

ture program benefits. We must advise you of our strong opposition to this approach and believe most other commodity organizations share our views.

There are numerous arguments against the approach and we would welcome the opportunity to review them with you and your colleagues.

Mr. Chairman, thank you for the opportunity to submit these requests.

[The information follows:]

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COTTON USA

COTTON USA Fact Sheet

MPP PROMOTION with Gunze Ltd., Japan

U.S. cotton exports in 1991-92 are up by 10% since 1988-89 when the current Market Promotion Program (MPP) began. In addition, exports of U.S. made cotton yarn and fabrics have risen sharply, a 19.6% gain in 1992 over 1991, amounting to $102 million. The total gain in raw cotton and value-added cotton products totaled $302 million in 1992 alone.

This growth did not happen by chance. The cotton marketing loan program instituted with the 1985 Farm Bill gave a major boost to U.S. cotton competitiveness. Another important element was the COTTON USA overseas promotion campaign using U.S. cotton industry funds and MPP funds.

Worldwide, the consumer chooses between synthetic fibers and cotton. As successfully demonstrated in the United States, consumer advertising can have a significant, positive impact on consumer buying preferences for cotton products. Overseas in key export markets for U.S. cotton, Cotton Council International (CCI) carries out a coordinated trade and consumer promotional campaign patterned after the successful U.S. cotton effort. The COTTON USA overseas promotion is the only consumer-directed campaign on behalf of American cotton producers. The COTTON USA trade mark is the only way for consumers to identify products made from U.S. cotton.

Gunze Ltd., Japan's leading knitwear manufacturer, is a specific MPP success story. Under a COTTON USA license, Gunze required its spinner-suppliers of knitting yarn to use U.S. grown cotton. On average 95% of the yarn Gunze bought was made only of U.S. grown cotton, compared with an overall Japanese average of 45%. In 1992 alone Gunze required its yarn suppliers to buy an additional $20 million worth of U.S. cotton. To help achieve this, CCI spent $573,000 of MPP funds in promotion–or a return of $35 to each MPP dollar spent. As their part of the promotion Gunze paid to label over 7,926,000 product units with the COTTON USA Mark and expended $1,900,000 of its own advertising funds to feature those labeled products. All of those Gunze advertisements also displayed prominently the COTTON USA Mark.

In just advertising Gunze expended $3.33 for each CCI dollar spent to build demand for products made of U.S. grown cotton. A key fact: **no MPP funds were actually paid to Gunze**. MPP funds were used as part of a total campaign to enhance consumer preference among Japanese consumers for U.S. cotton.

OTHER FACTS:

- The COTTON USA Mark recognition level has risen to 35% among consumers in the targeted countries.
- No MPP funds go directly to foreign companies for consumer advertising.
- U.S. manufacturers are encouraged and do participate in the COTTON USA promotion for U.S. value-added cotton exports.
- Over the life of its COTTON USA promotional involvement Gunze has consumed upwards of $60,000,000 of U.S. grown cotton that it would not have used if it remained at the average for Japanese mill consumption. This is clear additionality.
- By helping to stimulate Gunze's consumption of U.S. cotton, CCI's use of MPP funds has moved cotton into export channels and eliminated substantial government loan costs estimated at $977,000.
- The COTTON USA promotion attracted $1,900,000 of Gunze's 1992 advertising funds to be placed behind its knitwear made of U.S. grown cotton.
- To accomplish all of the above CCI utilized $573,000 of MPP funds in a larger advertising campaign in Japan that never involved payments of any kind to Gunze.

Mr. DURBIN. Thank you very much. And I think it is interesting, you probably heard the testimony of the mayor of Vienna, Georgia and you may not have heard the one part that he read there. He said that "the population of Dooly County has been declining steadily since the period between 1910 and 1920 when the cotton boll weevil invaded the land. Our agriculture-based economy began its long downward spiral."

We have this course of critics of agricultural research here, the self-anointed pork busters, and here we have a community in Georgia begging for help to get back on its feet economically and the kind of ag research that you are asking for through the National Cotton Council is going to save some producers and save some communities from those experiences and that sort of pain in the future.

I have done my best in the short time I have served here to try to encourage my colleagues to look at the positive side of ag research and I think you make some excellent points.

I have heard a lot about the whitefly problem and I know you are very concerned about it. We have talked about it personally. Congressman Pastor on our committee from Arizona brings that up regularly. So we are going to keep an eye on that one definitely.

Tell me about the market promotion program, though. You made reference to the Gunze Japanese underwear company that got all sorts of publicity. I would like to hear your side of the story if I could in terms of why that was a good investment.

Mr. CALVANI. And I also have two papers to give you. I could not add them to my remarks because I went over the amount of pages, but I would like to give them to you.

Mr. DURBIN. Sure. They will be included in the record.

Mr. CALVANI. It was a successful and it still is a successful promotion program for American cotton. We went to Gunze or Gunze came to National Cotton and what has happened is they are advertising their cotton underwear and they are enclosing a little cotton label in their advertising which is very similar to what I have on, which is our overseas market. Also then under our MPP funds, we used those funds to advertise this label and we also say that they can obtain this cotton in Gunze products.

Now, we never did give any money to Gunze but we are sharing advertisement with them. That is exactly how it works.

Mr. DURBIN. Where? In what country?

Mr. CALVANI. In Japan.

Mr. DURBIN. I see that one of the things that we brought up last year in this bill was a hope that we could start moving from raw commodities to value added products for export under MPP. If we can find ways, if there are opportunities for the National Cotton Council, for example, to promote the use of American-made cotton products overseas, then it helps your producers and it also puts some people to work in this country.

So I think what we are trying to do is to focus more on value added products as opposed to raw commodity headed overseas. I do not know if those opportunities are there but that really was, I think, one of the reasons why that example has been turned to so often.

Mr. CALVANI. We offer that to our American textile spinners and in some cases we are doing that. This has not caught on as great as we would like for it to also.

Mr. DURBIN. Well, I hope we can encourage it because I think it makes it easier to defend the program when we have American workers involved with the American farmers in this effort.

And a final point about the limitation proposed by the Clinton administration for receiving program funds, are there any limitations now under the program as to how much a producer can receive?

Mr. CALVANI. He can receive $50,000 under three entities.

Mr. DURBIN. Okay. And, of course, the Clinton administration is suggesting if there is $100,000 of farm income that they would be ineligible for program payments.

Mr. CALVANI. That is correct.

Mr. DURBIN. Do you have any idea how many of the growers would be affected by that limitation?

Mr. CALVANI. No, I do not, Mr. Chairman. And it is a little bit vague as to exactly what they are calling all farm income. We are concerned that such things as some of our growers would receive rebate from a cotton warehouse. We are not sure whether—is that called all farm income or not? That is where we are very vague. And so since we are vague in that, we really have no idea how many people would be affected.

Mr. DURBIN. Okay. Thank you.

Mr. Skeen?

Mr. SKEEN. Let us talk about the spinning situation on cotton. Do we have the spinning capability in this country today to handle our domestically produced cotton?

Mr. CALVANI. Excuse me. To——

Mr. SKEEN. Spin all of the domestic produced cotton in the United States? Do we have the spinning capability?

Mr. CALVANI. No. No, sir. I do not think——

Mr. SKEEN. That is one of the reasons why we go overseas, is it not?

Mr. CALVANI. Well, I am sure if we had a market for more textiles, I am sure that our spinning mill companies would certainly put in enough cotton.

Mr. SKEEN. The question is a different one than the chairman posed. But the tragic situation is that we produce a heck of a lot more cotton and wool than can be spun domestically. The spinning industry almost completely left the United States because they could not compete with those offshore spinners.

And I am not looking for any excuse but that is just the way it was, and now the raw fiber industries are concerned because our spinning capabilities are way down. We would like to bring this capability back which means more efficient producers. I think some of this technology will come back and the new spinning techniques will get better.

Let us go back to this off-farm income. Since only about 2.2 percent of the population in the United States is involved in agriculture today. I can tell you from firsthand experience, if farmers are prevented from calculating off-farm income they are not going to stay in agriculture unless they are an extremely large scale oper-

ation. The tragedy is that we have become more and more large scale operations as far as the agricultural production is concerned. It has been the trend for a lot of folks—particularly in the dairy industry, to milk a few cows but also hold down a job in town.

Mr. CALVANI. That is correct.

Mr. SKEEN. And I think that we are going to have to clear up what should be declared as off-farm income in the way we tax it. Do you agree with that?

Mr. CALVANI. I certainly, do. Yes, sir.

Mr. SKEEN. Am I characterizing it properly?

Mr. CALVANI. I think you are. I think you understand the problem very well, that most people, their wives work or——

Mr. SKEEN. It goes over the head of most people in this country today because we take everything for granted. It all comes in a neat little package in the grocery store or in the clothing store and we take it for granted. And you can walk through the supermarkets or the department stores anywhere in this country and 99 percent of it comes from overseas, because it is spun overseas.

Mr. CALVANI. Well, it is not quite that high but it is awful high.

Mr. SKEEN. Well, it is getting awful high. I always make it a little project to go through and look at all clothing labels and it is hard to find American made clothing because we are just not spinning and cutting the cloth. It is a shame. We need to do a better job of that.

Thank you.

Mr. DURBIN. Mr. Myers?

Mr. MYERS. Well, thank you. I look at labels for a different thing than you do, Joe. When I go to the store, I look for a cotton label.

Mr. CALVANI. Thank you.

Mr. MYERS. And it is doggone hard to find. You talked about the underwear. It is hard to find skivvies—for men. [Laughter.]

I was going to say it is hard to find cotton. A cotton shirt. I am wearing a cotton shirt now but they are doggone hard to find. You have to order them. I cannot find them in the store, very, very seldom. At least in a 36 sleeve that I have, it is kind of hard to find.

But in any event, I wish—what can you do to promote more cotton products? Are you people doing anything about that?

Mr. CALVANI. Yes, sir. We are doing all we can about that. We will certainly take any suggestions you have on that but we are doing—and if you will remember, you have probably seen our advertisements by Cotton Inc. that does promote cotton.

The reason you probably do not see it is a lot of these are targeted early in the morning to the housewife because we feel like that she buys most of the apparel in the family, so we put—on a lot of those commercials are done when the housewife is watching T.V. and something like that. But we do all we can to encourage the consumption of cotton.

Mr. DURBIN. Would my colleague yield for a second?

Mr. MYERS. Certainly. I always yield to the chairman.

Mr. DURBIN. I had the opportunity to visit the research center down in New Orleans and they are doing some fine work with cotton to make it wrinkle resistent and the like.

Mr. MYERS. Wash and wear.

Mr. DURBIN. And I think that is going to help your industry quite a bit.

Mr. SKEEN. They had a new skivvy line and called it John Myers wants you——

Mr. DURBIN. I do not remember that part of the trip but he was not with me all the time.

Mr. MYERS. Of course, I am the oldest person here. My dad wore BVDs, one piece. Remember those? Did you wear those, Joe?

Mr. SKEEN. Well, of course. They had a trap door.

Mr. MYERS. You may still have them. [Laughter.]

Well, thank you very much, Jerry.

Mr. DURBIN. Thank you very much.

[The statement follows:]

Statement by
Jerry Calvani
Chairman of the
National Cotton Council of America
before the
House Subcommittee on Agriculture,
Rural Development, Food and Drug Administration
and Related Agencies
April 20, 1993

SUMMARY OF SELECTED REQUESTS

ARS Value added textiles -- Increase ARS budget $1,500,000 for research on value added textile products and quality at New Orleans, LA and Clemson, SC.
Germplasm enhancement -- Increase ARS budget at College Station, TX by $100,000 for germplasm enhancement.
Sweetpotato whitefly (SPW) -- Increase ARS budget $1,900,000 for Research and Action Plan for SPW.

ES GOSSYM/COMAX -- Maintain ES budget for Gossym/Comax Information Unit at Mississippi State at $500,000.

APHIS Boll weevil eradication -- Request $13,600,000 for containment, eradication and methods development in CA, AZ, TX, VA, NC, SC, GA, FL, AL, TN and MS.

Pink bollworm -- Request $2,623,000 for pink bollworm containment, survey, quarantine, rearing equipment and support of an area wide trial in southern California.

Sweetpotato whitefly -- Request to maintain $3.5 million to accelerate development of biological control programs to control the sweetpotato whitefly.

Request funding at not less than FY93 levels for FAS, FMD, MPP, GSM and PL-480 programs.

The National Cotton Council is the central organization of the U.S. cotton industry, representing growers, ginners, cottonseed crushers, warehousemen, merchants, cooperatives, and textile manufacturers from California to the Carolinas. At the Council's annual meeting, the 300 delegates selected by 90 organizations endorsed expanded research, education, market development and action programs designed to increase competitiveness of U.S. cotton. Delegates also asked for research to solve environmental problems, calling for new methods to control pests, manage crops and conserve resources. They also support efforts to assure a wholesome and safe food and fiber supply.

The National Cotton Council recognizes that our country is confronted with a budget deficit so large that it threatens the nation's economic viability. We know that Congress must make some difficult choices about the allocation of resources. While we endorse efforts to bring the deficit under control, we would observe that agriculture has already taken larger funding cuts than other segments of our economy; now, agriculture is being asked, again, to take larger cuts than other segments. Since 1987, for example, the number of agricultural research scientists has been reduced by 20% and the current budget resolution would result in an additional 6% attrition in staff for agricultural research through 1998.

We feel strongly that research, extension, and action program funding is a competitive necessity representing a sound national investment. This will be true in spades if GATT, NAFTA, and subsequent international trade agreements substantially liberalize trade, as expected. In this regard, we are recommending several adjustments in USDA's proposed FY94 budget.

SCIENCE AND EDUCATION

Total funds for USDA research, education and related programs are proposed to be increased about 1.2% for 1994. These slight increases are in sharp contrast to the total needs for research and educational needs for agriculture.

Agricultural Research Service

The Agricultural Research Service (ARS) is proposed to receive a cut of more than 4%. While recognizing most of the reduction is in allocation for buildings and facilities, the request for research **operations** is increased slightly. This funding level does not provide adequate funds for meeting many new challenges in spite of aggressive redirection within the agency. We recommend additional funds to meet several major problems.

Sweetpotato Whitefly (SPW) For several years we have voiced alarm about the impending agricultural crisis caused by the SPW. Pest levels have increased annually to the point that in some parts of CA, AZ and TX, the potential for losses from this pest are of disaster proportions. Additionally, many of cotton's major markets are seriously threatened because of insect sugar on lint which makes it unsuitable for spinning. We have worked closely with USDA agencies on development of a master plan of research and action for the SPW. The plan calls for a multi-disciplinary approach involving state and federal agencies. The ARS has redirected funds from other programs, however further redirection is not plausible. ARS is in need of an increase of $1,900,000 in FY94 to bring the ARS funding to $3,700,000.

Value Added/Quality Research Continuing competitiveness depends not only on efficient production but on efficiencies in value-added processes as well. ARS utilization labs have been forced to sharply reduce staffs and program support due to limited budgets. Therefore, we request an increase of $1.5 million in the ARS budget to be allocated to laboratories at New Orleans and Clemson, SC. Funds will be used to accelerate research to: (1) develop processes to use sticky cotton, (2) improve durability and color-fastness of cotton products, (3) develop measurements to evaluate spinning utility of fiber, and (4) determine processes to eliminate dye defects.

Cotton Germplasm The U.S. cotton germplasm collection is maintained at the ARS Southern Crops Research Laboratory in College Station, TX. This collection serves researchers nationwide. Genetics research is needed to reduce chemicals, improve quality and boost productivity. We request an increase of $100,000 in FY94 for application of the newest biotechnologies to cotton and for evaluating enhanced germplasm in summer and winter nurseries.

Cooperative States Research Service (CSRS)
We support the IPM Special Grant (P.L. 89-106 Budget Line) program requested by CSRS because it will provide the opportunity for state scientists to seek funding to develop integrated pest management programs for the sweetpotato whitefly and other insects. The requested amount is $7 million, up from $4.457 million in FY93.

National Research Initiative (NRI) The NRI is slated for an increase from $97.5 million to $130.2 million in 1994. While we favor any increase which will boost basic research and fundamental knowledge of biological systems, it is important to note that we also favor increases in Hatch and other core programs. While competitive grants research programs provide basic building blocks for new technologies, the core programs of the state agricultural experiment stations and the ARS provide the essential "cement" to bring building blocks to full fruition. We hope that this committee will continue to consider all avenues of agricultural research funding.

Extension Service
Gossym/Comax Information Unit (GCIU) The GCIU headquartered at Mississippi State, MS is currently funded from ES at level of $492,000 annually. It assimilates research findings into computer crop models and it also provides training and distribution of programs to users. Gossym/Comax is the most advanced computer assisted crop growth models in the world. A study team consisting of federal, state and industry specialists have made several constructive recommendations which will be incorporated into 1994 operations. FY94 represents a critical year for the GCIU and we therefore request that ES funds for the GCIU Information Unit be provided at the original budgeted level of $500,000. 1994 is the fifth year of the 5-year pilot project.

Extension Pest Management and Pesticide Impact Assessment Programs We support the USDA requests for the Extension Pest Management programs and Pesticide Impact Assessment program at $8.6 million and $3.4 million, respectively.

MARKETING AND INSPECTION SERVICES

Animal and Plant Health Inspection Services
Action programs carried out by APHIS are of special importance to the cotton industry because of their potential to eliminate boll weevil and pink bollworm as pests of U.S. cotton.

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Boll Weevil Eradication Almost 1 million acres of cotton in 6 southeastern states are now free of the boll weevil. The boll weevil eradication program has solidly demonstrated environmental and economic benefits. Cotton growers have reduced their pesticide use by 70% and entire communities have been revitalized. We are requesting FY94 appropriations of $13,600,000 for APHIS's share of boll weevil eradication and suppression programs. Of this amount, $1,020,000 will be needed for the Texas/Oklahoma High Plains Boll Weevil Containment Program, $880,000 to protect the eradicated areas of Arizona and the desert valleys of California and the remaining $11.7 million will be used for the Southeastern Boll Weevil Eradication Program.

Funding for the federal 30% share in the Southeastern U.S. include costs of confirmation phase in GA, Southern AL, and FL; containment costs in VA, NC, and SC; and for expanding into Central and Northeast AL and Northwest GA. This request also includes funds in anticipation that growers of Northwest AL and Middle TN will request inclusion in the eradication program.

Geographic Information System: As future expansion areas are considered, improved methods incorporating computer technologies are needed. We are requesting that of the total request up to $455,000 be used for APHIS methods development activities to support the second year development of a pilot Geographic Information System (GIS) in the state of Mississippi.

Carryover Funds: Because of limited expansion into new areas in 1993, funds identified for expansion activities will be carried over into FY94 under no-year funding authority given to the USDA/APHIS boll weevil program by OMB. This carryover amount, $1.5 million, will give the program flexibility for sound management decisions.

Pink Bollworm Suppression Our FY94 request for $2.623 million for pink bollworm funding represents significant progress at developing the technology and physical facilities to begin wide area trials to demonstrate the technology to eradicate the pink bollworm from the U.S. This request is less than the $2.95 million provided in 1993. Of the total request, $1.45 million will be needed to continue APHIS participation in the San Joaquin Valley suppression program and survey and regulatory activities in other regions, $328,000 to complete the move to the new moth rearing unit in Phoenix and $845,000 to conduct a wide area trial of up to 20,000 acres in the Colorado River Valley of southern California.

Sweetpotato Whitefly We support the USDA request for $3.5 million for APHIS to conduct survey and action programs to combat the whitefly. We support those efforts and recommend APHIS continue to coordinate their efforts with the National Research and Action Plan for the SPW.

AGRICULTURAL WEATHER SERVICES

We note that the 1990 farm bill has authorized $5 million to carry out objectives of subtitle D, cited as the "National Agricultural Weather Information System Act of 1990." We support a nationally coordinated ag weather information system and request funds be appropriated for the Act.

USDA EXPORT MARKET DEVELOPMENT

On another front, Council delegates resolved to maximize the authorization of funds for foreign market development. Cotton Council International is a cooperator in the FAS market development program. We support funding for the Foreign Agricultural Service and Foreign Market Development Program at not less than the levels provided in FY93. In addition to the Market Development Program, FAS is now administering many new programs to help American agricultural products compete in global markets.

Cotton Council International is also a participant in the Market Promotion Program (MPP). The MPP program is authorized at $200 million per year. This program is proving to be very valuable in expanding exports of many U.S. agricultural products. Many commodities are participating in the program and its resources have already been reduced in the re-authorization process. We strongly support funding this program.

We support funding for continuation of GSM and PL-480 programs as they are important market development and maintenance tools. We are deeply concerned by the adverse impact of recent marketing practices of the cotton producing Republics of the Former Soviet Union. We urge all U.S. government agencies and the Congress to be mindful of the impact their practice of "fire-selling" cotton at well below world prices has have had on the U.S. cotton industry and CCC price support programs.

Cottonseed products are important income-producers for farmers, ginners, and oil mills. We support funding for the Sunflower and Cottonseed Oil Assistance Program (SCOAP) and (COAP).

SUMMARY

We are appreciative of continuing support for agriculture, research, education, action and market development programs and are encouraged with the progress made in recent years for decreasing costs, improving quality, and addressing environmental concerns. These strong national programs will be absolutely vital instruments for survival in the increasingly competitive global environment portended by GATT and NAFTA. We also want to record our strong opposition to means-testing or placing further limitations on farm program benefits.

AQUACULTURE VOCATIONAL EDUCATION

WITNESS

THOMAS GARRISON, THE NATIONAL COUNCIL FOR THE AGRICULTURAL EDUCATION

Mr. DURBIN. Dr. Thomas Garrison, National Council for Ag Education.

Mr. MYERS. Now, Joe, you are not the only one that has a constituent. I have a constituent here, too, and he is going to tell a story here that I visited and helped get the money for and it is a great project. I am very pleased to have him here today. Thank you.

Mr. DURBIN. Thank you for joining us, Dr. Garrison. And your statement will be made part of the record and if you would like to highlight it, we would appreciate it.

Mr. GARRISON. Thank you, Mr. Chairman and members of the committee.

It is always a privilege to talk about education, boys and girls, technology and what is happening in ag education today.

I am Dr. Tom Garrison. I am an area vocational director in Indiana. I have the privilege of having five high schools that I work with. Each of those five high schools have a vocational ag program. Today, I am going to spend a few minutes talking about one at South Putnam High School which has a national center for aquaculture.

In 1989, this committee working with the USDA and others suggested very highly that ag education needed to change. At that time, you suggested that aquaculture, because of the high need and the high agricultural import of aquaculture would be an important ingredient to consider.

Today, we have six learning centers throughout the United States: the state of Washington, Texas, Pennsylvania, Iowa, South Carolina and Indiana. These programs are all successful. In our particular situation, thanks to you folks, working with the Council on Agriculture Education which is now known as The Council, you have been kind to us, to provide us $40,000 in federal funds.

To show you the impact of what has happened, those $40,000 have been leveraged into our program in a rural Indiana school of about three-quarters of a million dollars. You set the stimulus for activity.

We now have in South Putnam, which is a rural school of about 400 students in the high school, a program that has about 6000 square feet that is used strictly for aquaculture and agriculture. But to give you some idea, I tried to count the squares up here, our laboratory just for aquaculture alone, not including the computer lab area, the classrooms and the offices and so forth, would be about the size of this particular conference room.

In this conference room, you would find a section for agricultural education and also a section for the total school because not only did we infuse aquaculture into agriculture, we also infused agriculture into the total curriculum and therefore we have the privilege of having a student body of about 400, about 70 percent or 280 of

those kids are enrolled some time through the year into this particular aquaculture lab.

It truly is state of the art technology. We have the computer science students, for instance, who control a monitor to the computer technology program to take the flow of oxygen, the nitrites and so forth.

This program went from an enrollment of 60 to 98 this year and the success we have in our program is the same throughout the United States. We truly have been successful in taking aquaculture to the public schools throughout the United States.

Through the years you have progressed from one phase to another to allow the growth to continue to promote aquaculture as a part of agriculture with the idea that eventually, soon, we are going to make a major breakthrough to have the economic input into the value added that we are all so concerned about as far as the future of aquaculture.

It is through the educational process to The Council to your efforts that I am here today to share with you some of the excitement happening and what is happening in your local areas. For instance, we recognize the fact that we have a great number of additional students enrolled. For instance, in South Putnam, we have students who are enrolled in aquaculture alone, two classes, as a matter of fact. About 35 or 40 kids enrolled in aquaculture.

The nice thing about this is many of those students had not ever planned to go to college and suddenly they are planning college curricula. We have one young lady, for instance, who is so interested in aquaculture that she is now enrolled in a five-year architectural engineering program and her primary goal is to concentrate on recirculation systems for business and industry in aquaculture. There are other situations we could discuss. A young lady whom I know who is going to Purdue University in ag science, a two-year program, concentrating on aquaculture.

These are just some of the local efforts that we have been able to achieve in South Putnam. In addition, each of the other five programs, in every situation we have success stories about students and the benefits that they have derived from your efforts. And we thank from The Council for your efforts.

Today we are asking you to consider the final phase of this program, which is to expand over the next two years the continuation of the involvement of the students from the inner city schools, the involvement of the county extension agents that we are working very closely with, with adult populations, populations that serve minorities, of which we seem to be very successful with, and for those students who for whatever reason have not necessarily been that successful in the academic field for some reason get hooked on aquaculture and I think in many cases they become mesmerized with the educational opportunities that suddenly I can be important because, yes, I am interested in this particular phase.

So on behalf of the Council today I urge you to consider—we have a request in for the next two years which will be our final request of $1.9 million to continue to expand the opportunities in the 50 states for the inclusion of aquaculture into agricultural education.

With that, Mr. Chairman, I will be happy to answer questions.

Mr. DURBIN. Dr. Garrison, how many students are involved in this project at South Putnam?

Mr. GARRISON. Ninety-eight students are involved in agriculture. Of those, about—they are all involved at some phase in aquaculture. The regular ag students are probably not nearly as involved but we have about two or three classes that are directly involved and that is all they concentrate on, is aquaculture.

Mr. DURBIN. What kind of fish are you raising?

Mr. GARRISON. We are raising tilapia. It is interesting that you ask the question because as we talk with the Council members, it appears that tilapia is rather the universal fish that is used at least to some degree in all six of the learning centers. And the reason it is and the easiest reason I can tell you is it is a forgiving fish, it has a high tolerance for a wide range of variance as far as pH, nitrite, oxygen, and those kinds of conditions.

Mr. MYERS. How does it taste?

Mr. DURBIN. It has a pretty good taste. I visited an aquaculture project at the Illinois State University over the break.

Mr. GARRISON. That is a fine program. We have been there a number of times. Yes, we have.

Mr. DURBIN. They keep the rooms pretty warm. The fish needs to be at about 83 degrees or something.

Mr. GARRISON. Yes. Right. That is correct. Right.

Mr. DURBIN. But I am glad to hear you are moving in that direction. I think people are not aware of the fact that we import so much seafood in this country and if we can develop a domestic source for it, jobs for Americans and a better balance of payments when it is all over.

Mr. GARRISON. Interestingly enough, I have in my pocket—I was asked not to testify on behalf—there is now research showing that tilapia can be profitable and this is the first research——

Mr. DURBIN. You have a tilapia in your pocket? [Laughter.]

Mr. GARRISON. I have information in my pocket.

Mr. DURBIN. Oh, okay. That is much better.

Mr. GARRISON. From a local university where it has been proven that tilapia—and this is real progress for us and as our kids continue to go through the programs and to continue to be excited about education, that is really the bottom line, as far as I am concerned.

I know absolutely nothing about aquaculture but I will sure talk about kids and education all day long.

Mr. DURBIN. Well, thank you for your dedication. I do not think people in education get enough gratitude. They get an awful lot of criticism. And you are right, you may not know a lot about tilapia but when you have a young man or woman excited about pursuing education because of something that we have gotten started here it makes us all feel good.

Mr. GARRISON. And we really appreciate the Council support, working with this particular subcommittee.

Mr. DURBIN. Thank you very much.

Mr. Skeen?

Mr. SKEEN. I have no questions, but I would say if you had a tilapia in your pocket it wears well.

Mr. GARRISON. Okay. Thank you. Thank you. I do have the data in my pocket. [Laughter.]

Tilapia is a hybrid fish. It is a fish that supposedly, to the history, this is the fish that Jesus used to feed the masses, if you are——

Mr. DURBIN. That is a pretty good endorsement.

Mr. GARRISON [continuing]. Right—involved in that particular phase of your life. We are very proud of it.

Mr. MYERS. Well, it is exciting to talk to the kids, though, who are excited about this program who will stay after school and come in during vacations even to take care of the fish and they really get dedicated. There are kids who are thinking about going into this business and society now—hey, I am beef producer; when I worked for a living, I was anyway, but we are eating more and more fish.

Mr. GARRISON. Right.

Mr. MYERS. Well, one thing I talked to you about, I wish sometimes—I have a farm that raises more fish now than it does soybeans; at least right now, it has a lot of fish on it.

Mr. GARRISON. We need to get together on that sometime.

Mr. MYERS. If I can just catch them.

Mr. DURBIN. We would like to talk a little bit more about the Myers farm but we have to get out of here by eight so we had better stop.

Thank you, Dr. Garrison.

Mr. MYERS. Well, it would take me a little longer than that really.

Mr. DURBIN. We appreciate your dropping by.

Mr. GARRISON. Thank you so much.

Mr. DURBIN. When we have a hearing on farm disasters, Mr. Myers will be here to talk a little bit for us.

Mr. MYERS. I am the only witness.

Mr. DURBIN. Okay. [Laughter.]

[The prepared statement follows:]



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Testimony of

Dr. Thomas Garrison,
Vocational Director
South Putnam School District
Greencastle, Indiana

of behalf of

The National Council for Agricultural Education

Before the

Agriculture, Rural Development, Food and Drug Administration
and Related Agencies Subcommittee on Appropriations

April 20, 1993

Mr. Chairman and members of the Committee, I am Dr. Tom Garrison, Putnam County Area Vocational Director, Greencastle, Indiana. I am appearing on behalf of the The National Council for Agricultural Education (The Council) to request final funding for the current program to "Infuse Aquaculture Education Into Agricultural Education."

South Putnam High School is one of six sites chosen by The Council to serve as aquaculture learning centers. We are very proud of our program in Indiana and believe we have one of the truly outstanding aquaculture teaching facilities in the United States and the world. The Indiana program is unique as the facility contains approximately 6,000 square feet of space and houses several very large recirculating production agriculture systems with the latest computer monitoring and control technology.

Additionally, the facility is designed to serve as a laboratory for English, math, chemistry, physics, computer science, biology, and general science. In fact, the aquaculture laboratory is available for every teacher in the school to use. The facility is so noteworthy it has been visited by members of Congress, the Governor and Lt. Governor or Indiana, our state superintendent of public instruction, other state government officials, visitors from nine foreign countries and thousands of elementary, secondary and college students. The facility has already been used on several occasions to conduct training programs.

The Council funds are a small, but integral part, of the support given to the Indiana facility. For instance, using only $40,000 in Federal funds from The Council we were able to leverage over $750,000 in state and local funds for our aquaculture education program. Obviously, we have made significant investments South Putnam in hardware and facilities and in the education of our students..

This combination of using Federal dollars to leverage state and local funds to teach science and math through aquaculture is not unique with South Putnam. To varying degrees, the Aquaculture Learning Centers supported by The Council in Iowa, Pennsylvania, South Carolina, Texas and Washington have all relied on a mix of Federal, state and local funding to make the programs successful. This is as it should be.

We wish to thank the Committee for your support.of this exceptional opportunity, through The Council, to encourage and develop the teaching of aquaculture in our public schools. Your continued support is the reason why we are enjoying success today.

I would like to quickly recap the program:

Phase I: Research

"A 1989 study by The National Council for Agricultural Education, funded by grants from the Appalachian Regional Development Commission and the U. S. Department of Agriculture (Soil Conservation Service, Cooperative State Research Service, Cooperative Extension Service), assessed existing aquaculture curriculum internationally and recommended the creation of new, comprehensive aquaculture instructional materials in the U. S. for use in secondary and post secondary agricultural education programs.

Phase II: Curriculum Development and Testing

In 1990, Congress, through USDA's Office of Higher Education (CSRS), began funding a multi-year project to: develop curriculum and support elements, field test content, and supply national teacher training on the materials.

In 1991, utilizing the new instructional materials, schools in Texas, Iowa, Indiana, South Carolina, Pennsylvania and Washington were selected to field test the curriculum. They completed the field tests January, 1992.

Phase III: Nationwide Outreach and Training

August 11-16, 1992, teacher teams from all 50 states received training in Raleigh, North Carolina on how to teach the material to students and to other teachers--a train the trainer program. Additionally, a recirculating systems manual was developed and instructors explored the model classroom recirculating system designed and built in cooperation with North Carolina State University. Recirculating systems are useful in classrooms to teach the dynamics of animal husbandry and water quality. The Cooperative Extension Service was a key player in this conference. This technical training on the recirculating system will help Extension aquaculture specialists around the country trouble-shoot systems as they are adopted in other secondary and post-secondary institutions, and as they become commercially viable in industry.

Some 2,000 copies of the 1,100 page, five volume, core curriculum and support materials were sent to all states fall 1992. States are replicating The Council training at their own teacher workshops in 1993.

Phase IV: Creating and Testing Additional Resource Materials, Regional Outreach

In 1993 The Council is utilizing Federal funding to: complete and field test species specific modules, support additional regional inservice training, design outreach programs to reach culturally diverse audiences, and begin to develop units on biotechnology and sustainable agriculture as they relate to aquaculture.

Results at the six test sites include a 50-400 % increase in students applying to study aquaculture and the integration of math and science into the aquaculture curriculum with the cooperation of teachers in other disciplines. Graduates of the secondary aquaculture education programs have practical and theoretical experience, addressing the need for competent, trained entry level employees. However, more importantly, studying this curriculum also encourages students to pursue post secondary study in aquaculture or other areas of environmental or earth science.

I might also report to the committee that in my home state of Indiana, professors at Purdue, who have freshmen students entering the university from the aquaculture program at South Putman High School, state that. "some of these new incoming students know more than current sophomores in our aquaculture program." We believe universities will increase the level of instruction to accommodate these better prepared entering students.

Additionally, because of the hands-on nature of the aquaculture curriculum and the suggested teaching methods, we are finding that students of all ability levels are meeting, and in many instances, surpassing the requirements of the instructional program. Students who were disinterested in formal education, are now eager to attend school to participate in the aquaculture program. Meanwhile, gifted and talented students become involved in independent research and study in aquaculture.

Also, this program has increased the level of cooperation between aquaculture specialists of the Extension Service and secondary agricultural education teachers. In this new era of tight budgets, we believe this cooperation will help facilitate the process of life-time learning. That is, adults will also benefit from the new knowledge in our secondary agricultural education programs and Extension agents will be better able to serve their primary customers.

Finally, I wish to describe the program we envision under the final phase of this program and respectfully request your support.

Phase V: Serving All Populations/Expanding Outreach Efforts/Institutionalizing the Program

After a national competition, one site will be chosen to receive support to become the national training center for secondary aquaculture education and will host secondary teachers from all 50 states on a regular basis to receive training on the curriculum, recirculating systems and newly developed or modified teaching materials.

The other learning centers would also receive support to enable them to better meet the needs of the states in their geographic region. Further, all would institute programs for minority audiences, work with inner city school students, update testing equipment, develop technology transfer programs and test newly developed material on sustainable agriculture and biotechnology as it pertains to aquaculture.

We are also seeking funding to produce consumer information on aquaculture which has been requested by aquaculture industry and to print and distribute another 2,500 copies of the core curriculum. We would complete the development on the sustainable agriculture and biotechnology materials and provide additional materials revisions and updates as well as monitor the success of the program.

Finally, we have almost finished the job we set out to do four years ago. To complete materials development and updates and institutionalize the infusion and outreach process, we are asking the Committee to fund a two year program. This should be our last request for funding for this aquaculture education program. We respectfully request funding from Congress in the amount of $1,910,000 be appropriated for the program in 1994. The funds would be utilized in 1994 and 1995.

I thank the members of the Committee and would be pleased to answer any questions.

FLORICULTURE INDUSTRY

WITNESS

TERRIL NELL, THE SOCIETY OF AMERICAN FLORISTS

Mr. DURBIN. Dr. Terril Nell, Society of American Florists. Welcome to our subcommittee.

Mr. NELL. Thank you.

Mr. DURBIN. We have your statement and please highlight it for us.

Mr. NELL. Good afternoon. The Society of American Florists is the only national trade association which represents the interest of more than 23,000 small business involved in the floral industry and we are quite pleased to be here this afternoon to present testimony on the importance of the floral industry to U.S. agriculture, to let you know that this industry represents at least 10 percent of farm agriculture, to share with you the significance of the floral industry to the U.S. consumers and also the need for federal funds to support research efforts for this industry.

My name is Terril Nell. I am chairman of the environmental horticulture department at the University of Florida in Gainesville. I have been involved in the floral industry for nearly 20 years and have specialized in developing new and efficient ways to ship floral products, to produce those products and to market them so the consumer will have a high quality, long lasting floral commodity.

I am here today to request that this subcommittee considering allocating research dollars within the U.S. Department of Agriculture budget for two very important projects affecting the floral industry and ultimately all of agriculture in this country. I realize that given the current economic climate of the country and the ongoing efforts of the Clinton administration and Congress to reduce the deficit the requests made before this subcommittee for federal funds may be viewed with some skepticism.

For that reason, I will attempt to show the value of these research projects not only to floriculture but to general agriculture, thus demonstrating how they qualify for funding through already existing budgets.

First, let me share with you some industry background. The floral industry is a $12 billion component of the U.S. economy and is considered to be the fastest growing sector of U.S. agriculture. The industry grows, distributes and sells cut flowers, cut foliage, potted flowering and potted foliage plants and bedding plants for the American public. In addition, the export of potted foliage, cut foliage and cut flowers contributes to the U.S. balance of trade. The opportunity to increase the exports is significant.

Small businesses, many times family owned, characterize floriculture production and retailing. Figures from the U.S. Department of Agriculture show there are nearly 10,000 growing establishments or producers in the United States, nearly 3000 floral wholesalers and close to 30,000 retail florists spread throughout every congressional district in this country.

Census Bureau figures also show more than 250,000 people are employed in commercial greenhouses, wholesale florists and retail

florists. In addition, more than 42,000 acres of greenhouses, shade houses and open ground are currently under floriculture production in the United States.

Floriculture is the most extensive form of agriculture and requires the highest capital investment of any part of agriculture. Greenhouse construction costs can begin at approximately $175,000 per acre and can go as high as $800,000 per acre. Floriculture as well is extremely labor intensive, requiring as many as 12 workers per acre.

USDA figures show that the floral and ornamental horticulture industries, in other words, flowers, plants and nursery stock, combined represent 10 percent of all crop agriculture in the United States. Thus, the farmgate value of floriculture and ornamental horticulture crops are ahead of wheat, ahead of cotton and ahead of tobacco and behind only corn and soybeans.

I hope it is apparent to you from these data that the floriculture and ornamental horticulture industry is a significant part of U.S. agriculture.

Now, let me share some information with you briefly about research. Historically, floriculture has been a model industry for agriculture innovation and development of technologies for improving efficiency and marketability. Domestic and international floriculture as well as general agriculture owe much to groundbreaking floriculture research conducted by research scientists at land grant universities and ARS facilities.

Floriculture was the first to use automatic irrigation and fertilization which are now standard for many agricultural commodities, including corn and cotton.

Trickle irrigation or micro-irrigation, derived from greenhouse watering systems has revolutionized arid climate agriculture.

Soil pasteurization, which is used to prevent soil diseases and minimize crop losses, was first developed in the greenhouse industry.

Tissue culture propagation was developed in the 1950s for orchid plants and has led to a very rapidly expanding biotechnology industry in crop and livestock agriculture.

Horticulture scientists have developed methods to conserve energy and water, prevent nutrient and pesticide groundwater pollution and reduce air pollution. Their methods are today models for all of agriculture.

Despite all of these accomplishments, the floriculture industry has been overlooked time and time again in the federal budget. The fact that the floriculture industry is neither food nor fiber has impacted this industry and the research greatly.

Some people look at flowers and plants strictly as luxuries but the fact remains that flowers and plants truly enhance the quality of daily life for the American public. Of course, we can all say that floral products are symbols of love, sympathy, joy and this week appreciation to secretaries as well. But beyond that, flowers and plants are proven to have psychological and physiological benefits. They reduce stress. They have been shown to reduce indoor air pollution and provide therapy to the aging and to mentally impaired citizens.

In addition, flowers and plants grown by this industry provide satisfaction for the millions of Americans who enjoy gardening, which has been shown in a recent national survey to be America's favorite leisure activity.

The floriculture industry has never benefitted from subsidies. Instead, the floriculture industry has invested in itself by donating more than $250,000 to the USDA over the last five years for a cooperative new crops development program.

The industry has also given about $600,000 per year in research grants to land grant colleges and ARS from endowments and foundations in the industry. An additional $1.5 million is provided annually from private organizations to support ongoing horticultural research programs.

But the research funding for floriculture's crops is still woefully inadequate. Current competitive grants programs and other public funding mechanisms are unable to meet the floriculture industry's research needs and it limits the ability of the U.S. industry to compete effectively in the world marketplace.

In fact, during the ARS hearings held in the spring of 1991 former congressman Bob Traxler from Michigan said for the record that only $5.8 million of the ARS budget, which is less than 1 percent of the total budget, was dedicated to research on floral and nursery crops.

Is this really fair considering that this industry constitutes 10 percent of all crop agriculture?

Today, therefore, I would like to submit for the record two research proposals for funding consideration. You have copies of both.

The first proposal addresses the issue of preventing runoff of water and fertilizer from floriculture production facilities. It has been established that runoff and subsequent groundwater contamination is a critical issue facing all of agriculture today. This funding request is for $916,000.

The second proposal deals with research to control and eradicate sweetpotato whitefly on floriculture crops. You heard about sweetpotato whitefly on cotton earlier. The pest on floriculture crops is a major problem not only in the floral industry but it is affecting vegetable crops and agronomic crops. The work done by floriculture scientists, the preliminary work, today is being used to control some of the agronomic problems that have appeared in the last several years. This project is estimated to cost $875,000.

The funds for both of these projects should be made available under a competitive grants program administered by ARS.

What results can we expect from these research projects?

If past experience in the floral industry is any indication, I firmly believe that the return on the federal investment for these two projects will be of enormous and farreaching proportions.

In conclusion, floriculture truly is a significant and rapidly expanding segment of U.S. agriculture. The statistics alone demonstrate the importance to the U.S. economy but I also want to point out that the USDA has recognized this fact by appointing a national chair for floriculture funded by ARS to evaluate the research needs of this industry and provide recommendations to the USDA

on the short term and long term needs of the floriculture industry. The results of this study will be released later this year.

Finally, I want to make it clear to the subcommittee that the floriculture industry should have the same opportunities for research dollars that other parts of agriculture have. Floriculture's importance to U.S. agriculture and the wideranging benefits of floral products to the American public cause us to demand no less.

Thank you very much for your time and your consideration, and I would be happy to answer any questions.

Mr. DURBIN. Dr. Nell, we hear about the whitefly research from all sorts of different people and I think you can rest assured that we are going to focus in on that. I do not know if there is any particular aspect of it that is peculiar to floriculture but we have heard from the National Cotton Council earlier and any number of growers about their concern with this pest and we will definitely move in that direction, I guarantee you that.

Mr. NELL. I would only ask that there be a provision that the floriculture entomologist can surely be included in this and that is the reason we are suggesting designated funding for those researchers because indeed the biological controls, the pesticide evaluations, were originally done by the floriculture scientists. It can be much cheaper to do it in a greenhouse with some of these crops than over large acreages.

Mr. DURBIN. One of the things I was not clear on is you mentioned at one point earmarking the grant then another point you mentioned a competitive grant. Which of the two are you looking for?

Mr. NELL. Both.

Mr. DURBIN. That will cover you, that is for sure.

Mr. NELL. Well, we are asking that it be earmarked for floriculture research, one in water quality and one in sweetpotato whitefly. But then it be administered as a competitive grants program, just as NRI is, with the idea that there are research scientists in place at land grant universities who can do the work but the money is not there. And if we can do it as a competitive grants basis, have it peer reviewed, put it where the people and facilities are, rather than earmarking in here that it should be Florida or North Carolina or Cornell. Let us let the peer reviewers make that decision.

Mr. DURBIN. I spent some time yesterday with a Dr. Lawson at Beltsville. I do not know if you are familiar with him.

Mr. NELL. Yes. I know Roger well.

Mr. DURBIN. He apparently does some outstanding work there.

Mr. NELL. And he was the one who led the SAF cooperative effort on new crops.

Mr. DURBIN. Did he?

Mr. NELL. Yes.

Mr. DURBIN. He has an impressive program there.

Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman. That was a good presentation, Dr. Nell.

Give me some idea of just how many land grant colleges are involved in horticulture.

Mr. NELL. Of course, every land grant college today probably has a floriculturist. We have seen the same declines in personnel that others have. Today, there are probably ten universities remaining in the United States with three people or more in floriculture research.

Mr. SKEEN. Well, it is common throughout the land grant system.

Mr. NELL. It is common throughout the land grant system.

Mr. SKEEN. The grants that you are interested in would be for your institution?

Mr. NELL. No, sir. I mean, we would surely have——

Mr. SKEEN. Across the board?

Mr. NELL [continuing]. Would surely have scientists who would be applying for a competitive grants program but this is throughout the land grant, 1890s and ARS systems.

Mr. SKEEN. Very good. Thank you.

Thank you, Mr. Chairman.

Mr. DURBIN. Mr. Myers?

Mr. MYERS. No questions. Thank you.

Mr. DURBIN. Thanks for joining us.

[The information follows:]



SOCIETY OF AMERICAN FLORISTS

Statement to

the House Subcommittee on Agriculture, Rural Development,

Food and Drug Administration

and Related Agencies

on

the need for federal research dollars for the

U.S. floriculture industry

Submitted by

The Society of American Florists

April 20, 1993

The Society of American Florists, the only national trade association representing the interests of more than 23,000 small businesses in the floral industry, is pleased to have the opportunity to present testimony today on the importance of the floral industry to U.S. agriculture and the need for federal funds to support research efforts in this industry.

My name is Dr. Terril Nell. I am chairman of the department of environmental horticulture at the University of Florida in Gainesville. I have been involved in the floriculture industry for nearly 20 years and have specialized in developing new and efficient ways to ship perishable floral products.

I am here today to request that this subcommittee consider allocating research dollars within the U.S. Department of Agriculture budget for two very important projects affecting the floral industry and, ultimately, all of agriculture in this country. I realize that given the current economic climate of the country and the ongoing efforts of the Clinton administration and Congress to reduce the deficit, requests made before this subcommittee for federal funds may be looked at with skepticism. For this reason, I will attempt to show you the value of these research projects to floriculture and general agriculture thus demonstrating how they qualify for funding through already established budgets.

First, some industry background. The floriculture industry is a $12 billion component of the U.S. economy and is considered to be the fastest growing sector of U.S. agriculture. The industry grows, distributes and sells cut flowers, foliage, potted flowering and foliage plants and bedding plants for the American public. Small businesses, many times family-owned, characterize floriculture production and retailing. Figures from the U.S. Department of Agriculture show there are nearly 10,000 growing establishments in the United States, nearly 3,000 floral wholesalers and close to 30,000 retail florists spread throughout every Congressional district in the country. Census Bureau figures also show that more than 250,000 people are employed in commercial greenhouses, wholesale florists and retail florists. In addition, more than 42,000 acres of greenhouses, shadehouses and open ground are currently under floricultural production in the United States.

Floriculture is the most intensive form of agriculture. It has the highest capital investment of any part of agriculture. Greenhouse construction costs can begin at approximately $175,000 per acre and can cost as much as $800,000. Floriculture is extremely labor intensive, requiring as many as 12 workers per acre.

Furthermore, USDA figures show that the floral and ornamental horticulture industries--that is flowers, plants and nursery stock combined--represent 10 percent of all crop agriculture in the United States. This ranks the farm gate value of floriculture and ornamental horticulture crops ahead of wheat, ahead of cotton and ahead of tobacco, and behind only corn and soybeans. I hope it is apparent to you from this data that the floriculture and ornamental horticulture industry is a significant part of U.S. agriculture.

Next, some brief comments about research. Floriculture has traditionally been a model industry for agricultural innovation and technologies for improving efficiency and marketability. Domestic and international floriculture as well as general agriculture owe much to ground breaking floriculture research conducted by research scientists at Land Grant universities, ARS research facilites as well as those connected with the Cooperative State Research Service. Floriculture was the first to use automatic irrigation and fertilization, now standard for many agricultural commodities including corn and cotton. Trickle irrigation, derived from greenhouse watering systems, has revolutionized arid climate agriculture. Soil pasteurization to minimize crop loss from diseases was first developed in the greenhouse. Tissue culture propagation, first used on orchid plants in the 1950's, has led to an entire biotechnology industry in crop and livestock agriculture. Floricultural scientists have developed methods to conserve energy and water, prevent nutrient and pesticide groundwater pollution and reduce air pollution. Their methods are models for all of agriculture.

Despite all of these accomplishments, the floriculture industry has been overlooked time and time again in the federal budget. The fact that our industry is neither food nor fiber has impacted us greatly. Some people

look at flowers and plants strictly as luxuries. But the fact remains that flowers and plants truly enhance the quality of daily life for the American public. Of course floral products are symbols of love, sympathy and joy. But beyond that, flowers and plants are proven to have psychological and physiological benefits, can reduce stress, have been shown to reduce indoor air pollution and provide therapy to the aging and to mentally impaired citizens. In addition, flowers and plants grown in this industry provide satisfaction for the millions of Americans who enjoy gardening--cited by a recent national survey as America's favorite leisure activity.

The floriculture industry has never benefited from subsidies. Instead, the floriculture industry has invested in itself by donating more than $250,000 to the USDA over the last five years for a cooperative program to develop new crops. The industry has also given about $600,000 per year in research grants to Land Grant colleges from endowments and foundations in the industry. An additional $1.5 million is provided annually from private organizations to support ongoing floriculture research programs.

But research funding for floriculture crops is still woefully inadequate. Current competitive grant programs and other public funding mechanisms are unable to meet the floriculture industry's research needs, and as such, the ability of the U.S. industry to compete effectively in the world marketplace is hampered. In fact, during the ARS hearings held in the spring of 1991, former congressman Bob Traxler from Michigan said for the record that only $5.8 million of the ARS budget--less than one percent of the total budget--was dedicated to research on floral and nursery crops. Is this really fair considering that this industry constitutes 10 percent of all crop agriculture?

Today, therefore, I would like to submit for the record two research proposals for funding consideration. The first proposal addresses the issue of preventing runoff of water and fertilizer from floriculture crops. Runoff and subsequent groundwater contamination is a critical issue facing all of agriculture today. This funding request is for $916,000. The second deals with research to control and eradicate the sweetpotato whitefly on floriculture crops. The pest is a major problem not only in the floral industry but on vegetable crops and cotton as well. This project is estimated to cost $875,520. The funds for both of these projects should be made available under a competitive grants program administered by ARS. What results can we expect from these research projects? If past experience in the floral industry is any indication, I firmly believe that the return on the federal investment for these two projects will be of enormous and far reaching proportions.

In conclusion, floriculture truly is a significant and growing part of U.S. agriculture. The statistics alone clearly show this. But I also want to point out that USDA has recognized this fact by appointing a national chair for floriculture funded by ARS to evaluate the research needs of this industry and provide recommendations to the USDA on the short term and long terms needs of the floriculture industry. The results of this study will be released later this year.

Finally, I want to make it clear to this subcommittee that the floriculture industry should have the same opportunities for research dollars that other parts of agriculture have. Floriculture's importance to U.S. agriculture and the wide ranging benefits floral products provide to the American public cause us to demand no less.

Thank you for your time and consideration. I would be happy to answer any questions you might have.

Title: **Water Quality Research to Prevent Runoff of Water and Nitrogen Fertilizer From Floriculture Crops**

Prepared by the following scientists at the request of Society of American Florists:
Endorsed by and complying with research priorities of: American Floral Endowment, Bedding Plant Foundation Incorporated and Professional Plant Growers Association, American Society for Horticultural Science Floriculture Working Groups.

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Abstract: Runoff of water and fertilizer from floriculture crops and nurseries must be stopped by reducing water and fertilizer use and/or recycling water and nutrient solutions. To accomplish this goal requires research to determine the amount of fertilizer and water needed to produce greenhouse crops under the wide range of environmental conditions found in greenhouses in the United States. Root media must be evaluated to increase water and nutrient holding efficiency. Fertilization strategies must be developed to accommodate a wide variety of systems. This proposal outlines necessary research than can be accomplished by a team of floriculture researchers across the country. A yearly budget of $916,000 is requested for a period of not less than 5 years.

Objectives:

1. To develop management strategies for limiting fertilizer leaching and waste water runoff and utilization from floriculture crops.

2. To determine the discrete amount of fertilizer and water required under various environmental conditions for production of several major greenhouse container grown and cut flower crops assuming no leaching or waste of applied fertilizer (subirrigation and traditional surface applied systems), and to define the optimal timing of application of the required fertilizer over the period of production and to determine effects on post production quality.

3. To refine and improve methods and recommendations for on-site soil testing of root media pH, EC, and primary nutrient levels by greenhouse operators and to determine interpretation guidelines for laboratory analysis.

4. To investigate physical and chemical properties of root media that increase the efficiency of absorption and retention of water and nutrients in greenhouse crop production and to develop computer based models and technology to control the interaction between irrigation and fertilization.

5. To develop management strategies for fertilization of greenhouse crops that can be applied by greenhouse operators with a variety of irrigation methods and irrigation water qualities including methods based on recirculation of irrigation water and nutrient solutions.

Justification:

Flowers and plants enhance the quality of life as people engage in daily activities. Floriculture crops enhance also the aesthetic beauty of our environment, and have positive psychological and physiological benefits to citizens of this country. In one study, for example, patients assigned to hospital rooms with windows facing natural scenes had shorter postoperative hospital stays and took less pain medication than matched patients facing a wall. Other studies have pointed to the positive role of plants in reducing stress. Continued production of floriculture plants is necessary for these benefits to be enjoyed by U. S. citizens.

Greenhouse production of plants and flowers in the United States was valued at $2.77 billion for 1990, up from approximately $1 billion in 1980 (USDA 1990 Floriculture Crops Statistics). The USDA Economic Research Service reported that in 1990 grower cash receipts totalled $8.1 billion for all domestic greenhouse and nursery production of ornamental plant products, a 7 percent increase from 1989. Greenhouse and nursery agriculture accounted for 10 percent of the farmgate value of agriculture in 1990. The majority of production in greenhouses and shadehouses is produced by 9,185 operations on 16,500 acres of greenhouses and shade structures. Intensive methods with frequent irrigation and fertilization are required to obtain the nearly $160,000 per acre production value.

Like the rest of agricultural producers, greenhouse operators have realized that once commonly used practices which were once commonly used are no longer acceptable due to the potential detrimental impact on water quality. As early as 1983 a report from California identified potential environmental contaminants from greenhouses (Jones, 1983). Trade publications and associations have highlighted this topic (Biernbaum, et al, 1988a; Biernbaum and Fonteno, 1989; Drushal, 1990; Walker and Dreesen, 1990; Wilkerson, 1990) and watering and fertilizing practices are being reevaluated (Biernbaum, 1990).

Improved fertilization recommendations and strategies need to be developed if greenhouse operations are to control water and fertilizer use. Controlling or stopping nitrate nitrogen is the first priority but soluble phosphate and heavy metal trace elements are also used extensively, more so than in field crop production (Nelson, 1990). Fertilization in greenhouses is not only done at higher concentrations than field crops but it is usually done on a year-round rather than seasonal basis. For example, production of poinsettias or chrysanthemum might be accomplished with 600 milliliters of solution containing 300 mg/liter nitrogen applied per 15-cm pot every three days on average. This rate of fertilization would apply 2258 kg/ha over one year compared to rates of 100 to 400 kg/ha/yr for agronomic and vegetable crops. Rates as high as 4444 kg/ha/yr have been estimated for chrysanthemum (Nelson, 1985). These rates are not necessary but have evolved because of irrigation and fertilization practices based on frequent, heavy leaching of the root media. Poinsettia crops grown with 1 gram of nitrogen per 15 cm pot, 319 kg/ha/yr is all that may be required. Heavy leaching of water and fertilizer is no longer acceptable and methods of irrigation and fertilization based on zero runoff must be implemented.

Methods of Procedure:

Objective 1. Nutrient Requirements

Current fertilizer recommendations for greenhouse, container grown ornamental plants are based primarily on the concentration of water soluble fertilizer applied at every irrigation with frequent, heavy leaching of the root media to prevent nutrient deficiencies or imbalances. If rates of fertilization and waste are to be reduced, recommendations must be based on the amount of fertilizer required to produce the crop. Defining nutrient needs relative to expected growth would be comparable to the yield goal methods of fertilization used for field crops.

Selected horticulture crops will be grown using standard cultural conditions except that all fertilizer applications will be measured and made so that all fertilizer remains in the growing container. Final results will be expressed as the quantity of nitrogen or nutrient per growing unit. Several application methods under a range of conditions must be tested. With regards to timing of fertilization, our hypothesis is that fertilizer rates should be greatest during the periods when dry weight accumulation is highest. Other important factors are the development of roots and the environmental conditions altering growth and water use. Plants will be grown with several fertilization strategies to supply different amounts of nutrients during definable phases of growth and development, such as early vegetative, late vegetative, reproductive, and flowering. Environmental conditions

altering growth rate and fertilizer requirements vary throughout the United States with declining light levels and increasing temperatures from north to south being the most important variation. Experimental conditions can be altered through temperature control in separate greenhouse sections, manipulation of light intensity, or cooperative studies at several Universities. Fertilization during production has been shown to influence performance and longevity for the consumer. Treatment effects on longevity will be evaluated.

Objective 2. On-Site Nutrient Monitoring and Interpretation of Laboratory Analysis

Greenhouse operators do not extensively use analytical methods to determine fertilizer requirements due to limited motivation or need since nutrient levels were maintained at above optimum levels by heavy application of fertilizer with frequent leaching. Once leaching is stopped, methods of applying a known amount of fertilizer as outlined in Objective 1 must be combined with monitoring nutrient levels available to the plant as determined regularly though root medium analysis. The problems with current methods have been thoroughly reviewed by Warncke (1990). Inconsistent sample collection methods, variable soil moisture levels at testing, inconsistent measuring methods for volume-based extractions and unrefined interpretation guidelines are the most important problems. The primary on-site method is 2:1, water:medium (volume) while laboratory analysis are primarily saturated media extractions (SME) and the difference in interpretation guidelines are often misunderstood. Once methods and recommendations are clarified, this information must be available to greenhouse operators.

Objective 3. Root Media Physical and Chemical Properties

Greenhouse root media are primarily peat or bark-based but a variety of components can be used to alter the buffering and water-holding capacity of the media and possibly alter fertilizer recommendations. Currently available root media must be evaluated to determine fertilizer recommendations should be modified to reflect differences in water/fertilizer practices. Media have been developed to be well drained and quick drying, and typically have a low nutrient holding capacity. Media components and amendments must be evaluated to increase water and nutrient-holding capacity without creating problems due to excessive moisture or fertilizer availability. Addition of resin coated fertilizer or slowly soluble fertilizers that can reduce the use of water soluble fertilizers will be investigated.

Objective 4. Management Strategies and Application Methods

Once optimum or desired nutrient content or concentration ranges are determined for a given crop, a delivery system must be developed so that a greenhouse operator can measure the current nutrient level, decide on a target nutrient level and apply the necessary quantity of nutrients in a predetermined volume of water. Given the relationship that total salt concentration in mg/liter can be determined by multiplying the EC of the root media by a correction factor (currently assumed to be 700 for a mixed solution of salts) (Bunt, 1989; Warncke, 1990), the salt content of a container of media can be determined by multiplying the container volume * EC * 700. The desired salt concentration minus the current salt level would indicate the amount of fertilizer salts to be applied. The concentration to apply would be determined by dividing the amount of salt by the amount of water to be applied. The water volume to be applied would be determined by the water holding capacity of the container minus the current weight determined gravimetrically. To be successful, the necessary balance and rates for each nutrient must be determined. Recommendations must be developed to account for the wide range or irrigation water quality (ie. alkalinity, hardness, contaminant levels) that occurs in the United States. Irrigation systems include hose and breaker, drip tubes, traveling booms, subirrigation mats, and subirrigation by flooding on floors, benches or troughs. Subirrigation methods can allow for recirculation of all water and fertilizer but cultural details must be developed. Other methods of runoff nutrient solution collection and recirculation should be explored.

Resume of Previous Investigations:

Fertilizer and pesticide reductions have been mandated by the Dutch government and research is underway in Holland to develop techniques to reduce the daily usage of these compounds. However, production technology

is considerably different in Holland than in the U. S. so these issues need to be addressed at research sites throughout our country.

The currently used fertilization rates and methods were developed during the 1960's. Soil-based media were being replaced by soilless, organic media composed of peat moss or bark blended with coarse components like sand, perlite or vermiculite. The media developed were porous, well drained and easy to water. The introduction of high volume drip watering systems using plastic tubing occurred at the same time. The automated watering systems were most successful with porous media that could be watered heavily to compensate for the lack of uniform application. High volumes of water required high concentrations of fertilizer to compensate for the frequent leaching of fertilizer salts, resulting in recommendations of regular applications of water and fertilizer with leaching to prevent the buildup of soluble fertilizer salts. Current fertilizer recommendations are based on the concentration of nitrogen or nutrients applied (Nelson, 1991), such as, 300 mg/liter nitrogen and potassium with every irrigation. Nutrient intensity and balance are maintained by leaching and analysis of the root media is not required. Leaching levels of 30 to 50% have been measured in controlled experiments with drip systems designed to duplicate commercial application (George, 1989; George et al, 1991).

No known research has been done to quantify actual amounts of fertilizer leaving production greenhouses. In a recent study, researchers at Cornell University have found high levels of nitrogen, phosphorus and potassium in the soil beneath the University greenhouses and in drainage water from tiles beneath the greenhouse (Walker, 1990). Concentrations of 250, 400 and 1200 mg/kg available nitrogen, phosphorus and potassium were found in the upper layer of soil beneath greenhouse benches. Concentrations in tile drainage was dependent on the water volume, but in one analysis was 115, 5, and 190 mg/liter nitrogen, phosphorus and potassium, respectively.

High rates of leaching and fertilization may be easier but are not necessary. Subirrigation systems with recirculated solutions were introduced in this country from Denmark and The Netherlands about six to seven years ago (Molitor, 1990). Container grown crops are grown on water tight benches or cement floors. Plants are irrigated by flooding the bench or floor to a depth of approximately 2.5 cm with water or nutrient solution. The solution is then drained, collected and reused. Early concerns about transfer of root pathogens through the solution have not been shown in commercial practice or research (George et al, 1989; George et al, 1990). The main problem is learning to monitor nutrient levels with no leaching of nutrients from the root media (Biernbaum et al, 1988a, 1990b).

While subirrigation with recirculation is superior to current methods and can essentially eliminate runoff of water and fertilizer from greenhouses. Currently less than 5% of the production in the United States is done with this method. The installation cost and lack of experience with management of this method will probably keep grower acceptance slow. Traditional irrigation systems can be used to make low volume, nonleaching applications of water and fertilizer. Methods to limit or eliminate runoff include low volume drip applicators, more uniform applications with traditional systems, pulsed application of nutrient solutions, and more absorbent media with higher water-holding capacity (Scott, 1989; Biernbaum et al, 1989a, Biernbaum, 1990c). Greenhouse operators are just beginning to experiment with these methods.

When leaching is reduced, growers need to understand that nutrient levels available to container grown plants are not only a function of the does applied, as current recommendations emphasize, but also of the volume applied. The same root media nutrient level was maintained for a poinsettia crop with 200 mg/liter nitrogen applied with 10% leaching or with 400 mg/liter nitrogen applied with 50% leaching (Yelanich and Biernbaum, 1990; Biernbaum et al, 1989). The difference between the two treatments in this study was 10 times the nitrogen applied and 40 times the amount wasted.

With both subirrigation and non leaching methods, estimates of the actual amount of fertilizer required and monitoring of the nutrient level in the root zone are needed to prevent excess application. Estimates of the total amount of nitrogen or other nutrients required per crop production cycle are not available. Root media analysis is currently done by removing a sample of the root media from the container, preparing either a 2 to 1 water to media dilution or a saturated media extract and testing it for pH and electrical conductivity (EC) (Warncke, 1990) The higher the EC the greater the level of soluble salts. EC and pH testing can be performed by greenhouse operators or individual nutrient analysis can be provided by commercial laboratories. There are four problems

with current testing methods. First, many greenhouse operators are unfamiliar with and do not use media analysis techniques. The current standards which were first published in the late 1950's and early 1960's may recommend higher concentrations than are needed for many crops. The third and perhaps most important problem is that the recommendations have not been refined to account for differences between developmental stages of growth, individual species, irrigation water quality and the effect of other cultural factors on defining optimal root media nutrient levels. The fourth problem is that high levels of soluble fertilizer in the surface layer of root media from plants grown with subirrigation or with traditional watering methods can lead to inconsistent or erroneous results.

Possible Cooperators:

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Jay Holcomb, The Pennsylvania State Univ.
Doug Hopper, Colorado State University
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Tom Weiler, Cornell University
R. McAvoy & G. Elliot, The Univ. of Conn.
John Dole, Oklahoma State University
Peter Fynn, OARDC, Ohio State

Budget:

Research scientists and facilities are already in place at several major Universities across the United States. Funding is required for technical support, graduate student research assistantships, greenhouse operating costs, soil and foliar analysis. The annual budget for this 5 year project is:

Technical Support	$280,000
Graduate Assistantships	120,000
Part-time labor	48,000
Soil/foliar analysis	80,000
Greenhouse operating expenses	48,000
Soil, pots, fertilizers, pesticides, labels	60,000
University/USDA overhead (44%)	280,000
TOTAL	916,000

Funds would be distributed through a competitive grants process based on the objectives of this project.

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Title: **Sweetpotato Whitefly Research on Floriculture Crops**

Prepared by the following scientists at the request of Society of American Florists: Endorsed by and complying with research priorities of: American Floral Endowment, Bedding Plant Foundation Incorporated and Professional Plant Growers Association.

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Abstract: The sweetpotato whitefly is one of the most serious pests attacking floricultural crops today. Because this is a new pest in the greenhouse, little is known concerning its biology/ecology. Such information is essential for the development of an integrated pest management (IPM) program for this pest. An integrated approach is extremely important not only for the ornamental horticulture industry, but for the agriculture industry in general. In 1986, this pest was reported for the first time as causing damage to the Florida poinsettia crop. Since that time, it has spread to many greenhouse crops, vegetables and agronomic crops nationwide, resulting in loses estimated to be in excess of $500 million. The success of control strategies utilized in systems other than ornamental production depends to a large degree on how successful the programs are in the floriculture industry. In fact, pesticide use patterns currently used in greenhouses for the control of sweetpotato whitefly populations have been identified that can be killed with pesticides that are just in the process of being labeled for use on vegetable crops. Secondly, many of the programs being employed for control of this pest on vegetables were developed by scientists working on floriculture crops. Integrated research is needed in the following areas: 1) understanding the relationship between temperature and development and on other biological characteristics on the most important rops affected, 2) development of statistically accurate sampling practices on the most important crops, 3) examine various crops affected for possible resistance and determine the mechanism(s) involved, 4) contrast various natural enemies for their ability to control this pest, and 5) determine the efficacy of selected 'biorational pesticides' and determine their compatibility with natural enemies. These areas are consistent with the objectives outlined in the National Research and Action Plan for Development of Management and Control Methodology for the Sweetpotato Whitefly. A yearly budget of $875,520 is requested.

Objectives:

1. To understand the relationship between temperature and development and other biological characteristics on the most important crops affected.
2. To develop statistically accurate sampling plans on the most important crops.
3. To examine various crops affected for possible resistance and determine the mechanisms(s) of the resistance.
4. To assess various natural enemies for their ability to control this pest.
5. To determine the efficacy of selected 'biorational pesticides' and evaluate their compatibility with natural enemies.

These objectives are not intended to be in the order of priority. It is expected that all will be accomplished by the combined efforts of the laboratories listed as possible cooperators or others as appropriate. The completion of all will be necessary for the implementation of a comprehensive IPM program.

Justification:

Flowers and ornamental plants enhance the quality of life for people and are symbols of love, sympathy and joy in daily activities. The environment is enhanced also by the presence of plants and flowers. Plants and flowers have been proven to have a positive psychological and physiological benefit to humans by reducing stress and by improving the overall quality of life. Consumers expect pest free flowers and plants and production methods must be established to allow for the continued production of these plants with fewer pesticides. The sweetpotato whitefly has been quite difficult to control in greenhouse grown ornamental crops for the last several years.

The sweetpotato whitefly damages many types of floriculture crops including poinsettia, hibiscus, lantana, etc. in four ways: 1) removal of phloem sap which reduced overall vigor of plants and in some cases can kill, 2) injection of a toxin which causes severe leaf chlorosis and/or stem whitening, 3) presence of honeydew which reduces the overall aesthetic value of plants, and 4) physical presence of whiteflies which is a concern for the retail florist and homeowner alike. The latter aspect is related to the enormous publicity this whitefly has received as a pest of vegetable crops in the desert valleys of the U.S. The negative implications this has had for sale of floriculture crops is unprecedented. At the present time Mexico has an quarantine on poinsettias from California and there is fear that this may spread. The only way to address this whitefly phobia is through mounting an aggressive research campaign across the country. It seems prudent to focus on this whitefly in the greenhouse because of the suspicions that it originated on floriculture crops in protected environments and then moved out into field production.

Objective #1:

A basic understanding of how the insect develops on the various crops attacked forms an all-important backdrop for any IPM program. While there is considerable information available from field crops, the data may not be applicable to floriculture crops. It is also essential to consider crop phenology in any st' !y of biology. Also, if natural enemies are to be an important part of future IPM programs, they must be included in these types of studies. With such information, the possibility of manipulating the greenhouse environment to the detriment of the pest but not the natural enemy will be known.

Objective #2:

The development of statistically reliable sampling plans are an important part of any IPM program. Two types of plans will be developed: a decision-making sampling plan for us by the grower and a population level sampling plan for use by the researchers. Both can be obtained with the same statistical design, but each must be developed separately. With this in place growers can determine: 1) early presence of the pest, 2) optimum time to treat, 3) whether treatment is necessary, 4) whether their treatments were effective, and 5) the impact (or lack thereof) of any natural enemy releases. Researchers can make use of the plan to learn more about the population dynamics of the whitefly and natural enemies through the life of the crop.

Objective #3:

Little is known concerning host plant resistance and sweetpotato whitefly for the various floriculture crops it attacks. Lack of such data is a serious shortcoming for the development of an IPM program. Even the rankings of cultivars from most to least sensitive would be important because such information could have immediate applicability: 1) growers would know what cultivars to examine when cuttings are purchases, and 2) where to sample most

intensively would become evident as well as where to spot treat in the event of a small infestation on a sensitive cultivar. There are many different cultivars of floriculture crops and they can differ dramatically in plant chemistry, leaf hairs, etc. all of which could influence the sweetpotato whitefly. Quite likely there is a significant resistance already present. Once this is determined and the mechanism(s) involved are known, then the feasibility of transferring resistance through a traditional breeding program will be known. Natural enemies must also be evaluated because a cultivar which presents a natural enemy from searching the leaves (for example, those with high leaf trichome density) and yet provide only partial resistance to the whitefly, may not be an effective cultivar to sue in an IPM program where biological control plays a major role.

Objective #4:
Many natural enemies are known from the sweetpotato whitefly attacking field crops all over the world. As natural enemies are examined for their utility in the field, they can be examined concurrently for their effectiveness on floriculture crops in the greenhouse.

Objective #5:
Examine new and old biorational type materials (for example, the juvenoids) for their ability to provide whitefly control and to allow the natural enemies of whiteflies to survive. Many of these types of materials have good potential for eventual registration because of low mammalian toxicity, minimal risk to soil and ground water, etc.

Methodology: Specific research proposals will be prepared by the individual researchers to answer the objectives. The following research guidelines are merely examples of how the problems may be approached.

Objective #1:
Leaf clip cages can be used to confine newly emerged adults to the leaf. The adults can be moved to a new leaf every day until their death. Eggs can be counted and subsequent % egg hatch and immature development and survival can be determined. This can be done at range of temperatures commonly found in the greenhouse; different stages of plant growth can also be used. Similar studies can be duplicated with natural enemies.

Objective #2:
Using poinsettias as an example crops, this study will require approximately 1500 poinsettia cuttings and 750 yellow sticky traps; the trial period will be 15 weeks. The greenhouse area will be divided in 25-30 blocks of equivalent size and 2 leaves per plant (one each from the upper and lower leaves) will be examined with a hand lens in the greenhouse. Once breaks have developed 2 breaks per plant will be removed (one each from the inside and outside of the plant canopy) and brought back to the lab. After recording the position of each leaf on a break, each leaf will be examined for eggs, immatures, and pupae. To track adult numbers over time, two yellow sticky cards will be positioned in each block just above the plant canopy and moved with the canopy as it grows. From these data, the following will be calculated: 1) "Horizontal" distribution of stages - mean/variance relationship per plant will be computed for each life stage. Once the distribution has been compared to an appropriate model the distribution will be calculated and used to estimate sample sizes. A sampling plan

following the one created for leafminers on chrysanthemum will be developed. 2) "Vertical" distribution within plants: Once strata have been assigned, densities of each life stage per stratum will be compared using ANOVA and Scheffe's test for comparison of means. Departure from a stable age distribution will also be evaluated. 3) Sticky card counts per unit area of greenhouse will be correlated with values from leaf samples. Locations of cards will be considered in correlating data on trop catch with immature stages.

Objective #3:
An evaluation of host plant resistance can be calculated using the leaf clip cages discussed under Objective #1. However, this must also include an evaluation of adult preference in choice and no-choice tests. Natural enemy effectiveness must also be determined. This can be accomplished by allowing the natural enemy to forage on a leaf with a known number of susceptible whitefly stages. The % killed through host feeding and egg laying can be determined and compared with a standard cultivar where the natural enemy is effective.

Objective #4:
Natural enemies can be collected in the field and placed in colony cages. Also, those working on natural enemies of sweetpotato in various parts of the U.S. and world can send natural enemies to those scientists working with biological control on floriculture crops. Whole caged plants with known numbers of whitefly immatures will be used; a natural enemy will be released into the cage and the following calculated: longevity, number killed through host feeding, number killed due to oviposition (both of these are various prey densities) and % survival. This should provide good comparative data. In addition, the development of a mass-rearing program must be examined as well as the utility of the 'best' natural enemy in the greenhouse.

Objective #5:
By exposing plants to ovipositing whiteflies for a short period of time (, 4 h) and then moving plants to an isolated area to allow for whitefly development, uniform age structure can be obtained. Plants will be prepared f\such that plants will only contain eggs, first - fourth stage nymphs, and red-eye pupae. Pretreatment counts will be made before any juvenoid is applied and at least 10 plants will be used for each stage - juvenoid assessment. There will be ten control plants per stage - juvenoid combination; these will receive applications of water. Formulated materials of each of the juvenoids will be used. In situations where adults emerge after treatments, they will be held in small vials with a clean poinsettia leaf which will be changed every 2 days. Longevity and fecundity will be determined and compared with whiteflies emerging from controls. Analysis of Variance (with appropriate transformation) will be used to evaluate the impact of the juvenoids of the developmental stages as well as on the adult longevity and fecundity of B. tabaci.

Most natural enemies prefer to oviposit in third stage nymphs, so test plants will be standardized with this stage on the underside of leaves. Newly emerged parasitoids will be caged with a single leaf standardized with an abundance of third stage nymphs. Applications will be made to third stage nymphs prior to any foraging behavior by the parasitoid; thus we will be able to measure the impact on eggs deposited into nymphs already treated with the material in addition to whether the presence of the juvenoid will reduce oviposition by the parasitoid. Another set of experiments will evaluate juvenoid application 49h after parasitoids have ovipositied; thus impact on developing parasitoids can be measured. In all cases, the percentage of parasitoids emerging will be calculated and these will be held and analyzed for

their ability to reproduce. A parasitoid control will be set up with each treatment for a comparison of percent emergence data and overall ability of parasitoids to lay eggs in control vs. juvenoid treatments. A replicated Goodness of Fit Test (G statistic) will be used to contrast expected (control) values and observed (treatment values).

Possible Cooperators:

James Price, University of Florida
Bill Miller, Clemson University
John Sanderson, Cornell University
Richard Lindquist, Ohio State University
Ron Oetting, University of Georgia
Dave Smitley, Michigan State University
Mark Ascerno, University of Minnesota

Budget:

The research effort required to attain the goals outlined in this proposal would be large and national in scope. The research objectives will require three-five years to fulfill. An estimate of the annual budget for this project is:

ANNUAL BUDGET

Technical support	280,000
Graduate assistantships	120,000
Part-time labor	64,000
Greenhouse operating expenses	80,000
Plants, pots, soil, fertilizers etc.	64,000
University/USDA overhead (44%)	267,520
TOTAL	875,520

67-181 O—93——27

HUMAN NUTRITION RESEARCH

WITNESS

IRVIN H. ROSENBERG, M.D., DIRECTOR, USDA HUMAN NUTRITION RESEARCH CENTER, TUFTS UNIVERSITY

Mr. Durbin. Dr. Rosenberg from Tufts University, Human Nutrition Research Center. Thank you for joining us today.

Dr. ROSENBERG. Thank you for the opportunity, Mr. Chairman.

Mr. DURBIN. We have your statement, we will include it in the record. If you would like to highlight it, please proceed.

Dr. ROSENBERG. Thank you. My name is Dr. Irwin Rosenberg and I am the Dean for Nutrition and Director of the USDA Human Nutrition Research Center on Aging at Tufts University.

Our center was first authorized by this committee 15 years ago and we passed our tenth year in our building on the Health Sciences campus at Tufts University in Boston during this past year.

We are most grateful to this committee for the support of our center and its unique dedication to research on nutrition and aging. The foresight in establishing this center with its mission to conduct fundamental research on the role of nutrients and diet in the aging process and to provide a sound scientific basis for meeting nutritional needs and preventing disease and disability in our growing elderly population was a powerful investment in the future health of our population.

From one American in 25 being over age 65 at the beginning of this century, we have increased to one in eight Americans over 65 presently and by early next century, one in five Americans will be over that age. Persons over age 85 are the fastest-growing segment of our population.

It is increasingly essential that we understand the needs of this aging population so that we can maintain the greatest possible degree of health, independence and quality of life.

In this year, I need not remind the committee how important it is to understand the way in which diet and lifestyle can prevent disability and disease and thus contribute to our ability to maintain health while controlling the cost of health care.

We are proud of our accomplishments and contributions and I will enumerate just a few of these in the few minutes available to me. I will try to make you aware of our need to move our program forward at this critical time in the nation's history.

Our center has been in the forefront of research in the prevention of age related loss of bone density leading to osteoporosis and fracture. This condition seriously affects more than 1.3 million people and results in an expenditure of over $10 billion a year in health care costs.

We are learning that dietary prevention of osteoporosis and bone loss may require different programs in different women of different ages and also in different racial groups.

We are extending our studies of prevention to include evaluation of the interaction of diet and exercise throughout the adult life span.

The most commonly performed operation in our elderly population at a cost approaching $4 billion a year is extraction of cata-

ract. Cataract lenses impair the vision and quality of life for nearly half of older Americans beyond the age of 75. Our research, confirmed now by other laboratories, has shown that dietary intake patterns may be critical in the slowing or preventing of the development of cataracts by providing the antioxidant nutrients beta-carotene, vitamin E and vitamin C. These nutrients defend against the age-related damage to the lens proteins of the eye. These observations have come from a combination of basic laboratory research and studies in older Americans that are a special capability of our center.

National intervention trials are underway to determine the best means of preventing or retarding the onset of cataract. Our progress in these activities could save billions of dollars and improve the lives of our growing elderly population.

These same antioxidant nutrients in our diet, best provided by an adequate intake of our rich harvest of fruits and vegetables, may have other substantial beneficial effects on health promotion. Recent work leads to the conclusion that dietary prevention of heart disease, the number one cause of mortality in this country at a cost of $65 billion for medical expenses and disability, may be influenced not only by positive choices with respect to dietary fat but also those with respect to nutrients in our diet.

These protective nutrients are included in vegetables and grains and vegetable oils that can counteract the oxidative damage that may lead and contribute to atherosclerosis.

In recent exciting new observations, our laboratory and others have identified new risk factors for heart disease that can be identified in the blood but more importantly modified by our intake of foods rich in vitamin B6, vitamin B12 and folate. Thus, our research on the nutritional requirements for a population growing older has the possibility of providing dietary guidance that can retard the onset of our number one killer disease.

Interestingly, some of these same nutrients may also be important in counteracting the earliest changes in tissues that may ultimately lead to cancer.

One of the dramatic changes in our bodies as we grow older is the decrease in lean or muscle mass and the increase in fat mass. We are using state-of-the-art techniques of body composition to understand the health implications of these changes in body composition and distribution and have already demonstrated that a balanced program of exercise including strength training as well as the aerobic forms of exercise can maintain health and strength and a healthier body composition even in people as they grow older, even in those 90 years and above.

The interaction of appropriately designed exercise and diet may be the two most important means of health promotion, disease prevention and cost savings as we move into the next phase of our approach to health care reform.

Our immune system helps to protect us not only against infection but also against malignancy. We are learning that declining immune function with age is not an inevitable consequence of aging and we can modulate this system with proper dietary intake of key nutrients, including vitamin B6, vitamin E and zinc. The

possible health benefits of appropriate maintenance of immune defenses could be very substantial.

We have exciting and important preliminary information that links diet and nutrition to some of the changes in cognitive function and memory that affect so many older Americans. There are not only direct relationships between dietary vitamins and brain function but also the same vitamins that can protect against coronary disease may also protect against stroke and dementia related to cerebrovascular disease.

Our highest priority for program development in the last two years has been in the field of neuroscience with emphasis on nutrition, aging and brain function. We have not been able to progress as fast as desired in this critical area of health research because our budget has been flat funded for the last three years and this has resulted in some program contraction and inability to expand into this important area of opportunity.

Mr. Chairman, I deeply understand and appreciate the difficult choices that you and your subcommittee face this year in spending. But the long term savings to the Federal Government and to the American taxpayer can be substantial as a result of this research from both health care cost reduction and improved quality of life for our nation's senior citizens.

We are one of five nutrition centers under the USDA ARS. Each of them has an important contribution to make and each of them has needs. We appreciate that.

We are once again requesting an additional $750,000 in funding in the 1994 fiscal year to permit an expansion of this research on the prevention of disability associated with loss of mental function. This could be one of our most important research investments. This would represent an increase in funding smaller than that required to keep up with inflationary costs so that we can at least approach the maintenance of a vigorous research effort in this vital area of the health of our nation.

Mr. Chairman, I want once again to thank you and the committee for your support in the past and for your confidence. We have every intention to merit that support in the future.

Thank you.

Mr. DURBIN. Dr. Rosenberg, how many years has this research been underway at Tufts?

Dr. ROSENBERG. The authorizing legislation occurred from this committee 15 years ago. The building that we are in was opened ten years ago. So this is a relatively new and young activity. Previous to this, there was not much attention to research on nutrition and aging and the elderly. We are the only center of this kind in the world and have therefore made substantial contributions to our understanding in this area at this time.

Mr. DURBIN. And how many people work at the center on this research?

Dr. ROSENBERG. We have a scientific faculty of about 45 and a total of 250 scientists and support staff at the center.

Mr. DURBIN. Do you take multi-vitamins?

Dr. ROSENBERG. I do not. But I am very conscious of the vitamins that I get in my diet.

Mr. DURBIN. More conscious than most of us, I am sure.

Dr. ROSENBERG. From good American food.

Mr. DURBIN. Thank you.

Mr. Skeen?

Mr. SKEEN. That is a rather personal question.

Mr. DURBIN. Well, everything is on the record here, Joe.

Dr. ROSENBERG. But I would say, Mr. Chairman, that there certainly are segments of our elderly population who are not going to meet their needs from diet alone and we are certainly recommending that some of them take supplementary vitamins but the important thing is to understand the way that diet can help us to maintain health and prevent disease.

Mr. SKEEN. I laud and applaud your work, Dr. Rosenberg. I think it is very important. I was astounded to learn the other day when we toured the Southern Regional Research Center that Americans drink more soda pop than they drink water. The consumption of milk, which has a reflection on the osteoporosis situation, has dropped dramatically, particularly in women. From the teenage years on, it keeps declining and for males it drops off somewhat later. It was astounding information. I think your work is extremely important and your process of educating the public to stay healthier longer and live longer is an important project, and I laud you for it.

Dr. ROSENBERG. Thank you, Congressman.

Mr. SKEEN. Thank you, sir.

Mr. DURBIN. Mr. Myers?

Mr. MYERS. Is any research being done by you or anyone on diet and the contribution to Alzheimer's?

Dr. ROSENBERG. The thrust in the area of neuroscience, which I mentioned, clearly addresses some aspects of that. I think it is fair to say that the tremendous scourge of Alzheimer's with the severe loss of mental function and dementia is probably not a single entity but a variety of entities. There certainly is a metabolic abnormality which results in Alzheimer's but associated with these same things there are probably contributions from cerebrovascular disease and even from specific nutritional deficiencies.

We have evidence that some of what we are calling Alzheimer's Disease could be nutritionally preventable and even more of it could be preventable if we could prevent the hardening of arteries to the brain that we think are related at least in part to some of the nutritional aspects that we are talking about with special protective vitamins.

We are very excited about the possibility that we can start to talk about nutrients in the diet as positive things, as protective things, rather than as Congressman Skeen pointed out, that rather than simply scaring people not to eat things. We think that we can start to turn that around in the next period of time and one of the things that we will be addressing is the maintenance of mental function. And I think that although—I am not prepared to say that Alzheimer's itself at the present time is a nutritional problem, it certainly is going to turn out to be a metabolic problem that I think may have a nutritional aspect.

Mr. MYERS. It may be too late to help some of us. We are past that hump maybe.

Dr. ROSENBERG. No, one of the things that we have learned at the center is that is never to late.

Mr. MYERS. Will it come back?

Dr. ROSENBERG. Yes. All of these things will come back.

Mr. MYERS. Triglycerides. Have we ever determined what contribution diet may have?

Dr. ROSENBERG. Yes, I think that we have a good deal of information now about dietary aspects of the balance of carbohydrates in the diet versus blood triglycerides, some of the fish oil derived fatty acids and their effect on triglycerides. But I think that again we are learning that we need to think about the total balance of the diet rather than just one aspect of the diet in addressing some of these individual markers and as we look at the broader marks of risk of cardiovascular disease, we see that there are many other things that we can do in the diet that influence risk in addition to influencing triglycerides or cholesterol alone.

Mr. MYERS. The trouble with all this is you worry about all those things, you forget to enjoy your meal.

Dr. ROSENBERG. That is the other thing. I think that we are—that is part of our research. As we look at eating behavior in the elderly, one of the things we realize is that we must encourage the positive attitudes about eating and a positive setting for eating and that is true for all of us.

Mr. MYERS. Thank you.

Mr. DURBIN. Thank you, Doctor.

Dr. ROSENBERG. Thank you.

[The statement follows:]

TESTIMONY OF

IRWIN H. ROSENBERG. M.D.

DIRECTOR, PROFESSOR OF MEDICINE AND NUTRITION

PRESENTED TO

HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE

ON BEHALF OF

UNITED STATES DEPARTMENT OF AGRICULTURE

HUMAN NUTRITION RESEARCH CENTER ON AGING

AT TUFTS UNIVERSITY,

BOSTON, MA

APRIL, 1993

My name is Dr. Irwin Rosenberg and I am the Director of the USDA Human Nutrition Research Center on Aging at Tufts University (HNRCA). Our Center was first authorized by this committee fifteen years ago and we passed our tenth year in our building on the Health Sciences Campus at Tufts University in Boston during this past year. We are most grateful to this committee for the support of our Center and its unique dedication to research on nutrition and aging. The foresight in establishing this Center with its mission to conduct fundamental research on the role of nutrients and diet in the aging process and to provide a sound scientific basis for meeting nutritional needs and preventing disease and disability in our growing elderly population was a powerful investment in the future health of our population. From one American in twenty-five being over age sixty-five at the beginning of this century, we have increased to one in eight Americans over sixty-five, by early in the next century one in five Americans will be over the age of sixty-five. Persons over age eighty-five are the fastest growing segment of our population. It is increasingly essential that we understand the needs of this aging population so that we can maintain the greatest possible degree of health, independence, and quality of life. In this year, I needn't remind the committee how important it is to understand the way in which diet and lifestyle can prevent disability and disease and thus contribute to our ability to maintain health while controlling the cost of health care. We are proud of our accomplishments and contributions and I will enumerate several in these few minutes available now. I will try to make you aware of our need to move our program forward at this critical time in the nations' history.

- Our Center has been in the forefront of research on the nutritional needs of women after menopause, with particular attention to the prevention of age-related loss of bone density leading to osteoporosis and fracture. This condition seriously affects more than 1.3 million people and results in an expenditure of over $10 billion a year in health care costs. HNRC scientists have targeted specific periods after menopause in which increased calcium intake can have a major impact on this prevention of bone loss and have shown how the special

vitamin D requirements of this population must be met in any program of prevention. We are learning that dietary prevention of osteoporosis and bone loss may require different programs in different racial groups. We are extending our studies of prevention to include evaluation of the interaction of diet and exercise throughout adult life.

- The most commonly performed operation in our elderly population, at a cost approaching $4 billion a year, is extraction of cataract. Cataract lenses impair the vision and quality of life in nearly half of older Americans by the age of 75. Our research, confirmed now by other laboratories, has shown that dietary intake patterns may be critical in the slowing or preventing of the development of cataract by providing the antioxidant nutrients, beta-carotene, vitamin E, and vitamin C. These nutrients defend against the age-related damage to the lens proteins of the eye. These observations have come from the combination of basic laboratory research and studies in older Americans that are a special capability of our Center. National intervention trials are underway to determine the best means of preventing or retarding the onset of cataract. Our progress in these activities could save billions of dollars and improve the lives of our growing elderly population.

- These same antioxidant nutrients in our diet, best provided by an adequate intake of our rich harvest of fruits and vegetables, may have other substantial beneficial effects on health promotion. Recent work leads to the conclusion that dietary prevention of heart disease (the number one cause of mortality in this country at a cost of $65 billion for medical expenses and disability) may be influenced not only by positive choices with respect to dietary fat but also with respect to the nutrients in our diet. These protective nutrients are included in vegetables and grains and vegetable oils, that can counteract the oxidative damage that leads to atherosclerosis. In recent exciting new observations, our laboratory and others has identified new risk factors for heart disease that can be identified in the blood, but, more importantly, modified by our intake in vitamins of foods rich in vitamin B6, vitamin B12

and folate. Thus, our research on the nutritional requirements for a population growing older has the possibility of providing dietary guidance that can retard the onset of our number one killer disease. Interestingly, some of these same nutrients may also be important in counteracting the earliest changes in tissues that may ultimately lead to cancer.

- One of the dramatic changes in our bodies as we grow older is the decrease in lean or muscle mass and the increase in fat mass. We are using state-of-the-art techniques of body composition to understand the health implications of these changes in body composition and distribution and have already demonstrated that a balanced program of exercise, including strength training as well as aerobic forms of exercise, can maintain health and strength and a healthier body composition even in people over ninety years old. The interaction of appropriately designed exercise and diet may be the two most important means of health promotion, disease prevention, and cost savings as we move into the next phase of our approach to health care reform.

- Our immune system helps to protect us against not only infection but also malignancy. We are learning that declining immune function with age is not an inevitable consequence of aging and we can modulate this system with proper dietary intake of key nutrients including vitamin B6, vitamin E, and zinc. The possible health benefits of appropriate maintenance of immune defenses could be very substantial.

- We have exciting and important preliminary information that links diet and nutrition to some of the changes in cognitive function and memory that affects so many older Americans. There are not only direct relationships between dietary vitamins and brain function, but also the same vitamins that can protect somewhat against coronary disease may also protect against stroke and dementia-related to cerebrovascular disease. Our highest priority for program development in the last two years has been in the field of

neurosciences with emphasis on nutrition, aging and brain function. We have not been able to progress as fast as desired in this critical area of health research because our budget has been flat funded for the last three years and this has resulted in some program contraction and inability to expand into this important area of opportunity.

Mr. Chairman, I deeply understand the difficult choices you and your Subcommittee face this year on spending, but the long-term savings to the federal government and the American taxpayer can be substantial as a result of this research from both health care costs reduction and improved quality of life for our nation's senior citizens. We are once again requesting an additional $750,000 in funding in the 1994 fiscal year to permit an expansion of this research in the prevention of disability associated with loss of mental function. This could be one of our most important research investments. This would represent an increase in funding smaller than that required to keep up with inflationary costs so that we can at least approach the maintenance of a vigorous research effort in this vital area of health of our nation.

Mr. Chairman, I want once again to thank you and the committee for your support and confidence. We have every intention to merit that support in the future.

PM-10 CLEAN AIR STUDY

WITNESS

RICHARD H. LEHAMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. DURBIN. Our colleague from California, the Honorable Rick Lehman.

Mr. LEHMAN. Mr. Chairman and members of the committee——

Mr. DURBIN. There is a premium to each witness who does not read his statement.

Mr. LEHMAN. Good. Well, I appreciate the opportunity to testify and I will submit my complete statement for the record.

I am here today to ask for $1 million to continue a vital clean air study in the San Joaquin Valley of California. Last year Congressman Fazio and I were successful in getting $1.4 million from the EPA budget to conduct a study of PM10, small particulate matter. We did not get money in the agriculture budget because of the budget constraints last year. The study began in 1990 when we got a $250,000 grant from EPA.

We are a non-attainment area. We are under a federal mandate to comply with PM10 restrictions or amounts by 2001. The key problem here is this: we have a mandate to meet the air quality standards for PM10, unless we know what is causing the problem and conduct studies as to how to go about correcting it, what we will do is just come out with some regulations but we will not have any impact on air quality.

This is very important to agriculture in the area, which is the major industry. Obviously we are going to have to be part of the solution. However, we want to make sure that the regulations are based on scientific evidence of where the small particulate matter is coming from and what steps could actually mitigate the problem. We want the burden of that mitigation distributed fairly among the different industries that are involved.

The overall funding scheme is included in my lengthy statement. Basically, half the money for the studies we envision coming from the Federal Government and the other half from local, state, private users, private individuals, and corporations.

Mr. DURBIN. What was the money that you secured last year used for?

Mr. LEHMAN. That was used to begin the studies and we have a preliminary report already out. We have a local organization put together of local business people, government officials and they did an initial study trying to identify the—you know, basically a scoping study to identify the parameters of the problem and get people who had scientific knowledge into the process. And that study is available at the present time.

Mr. DURBIN. So the first year, in 1990, you secured $250,000 and then last year $1.4 million and you are asking for $1 million this year.

Mr. LEHMAN. Yes. We are asking for $1 million here and I believe we are asking for a similar amount in the EPA budget.

Mr. DURBIN. You are asking for the same amount?

Mr. LEHMAN. In the EPA—1.4, I think, in the EPA budget again.

Mr. DURBIN. I see. And will that be it?

Mr. LEHMAN. No. The total cost of this is going to be between 15 and 23 million over time. And, like I said, half of that we view as a federal share and then half of it will be state, local and the private sector.

Mr. DURBIN. I do not think we have ever had a request along these lines, but we will take a look at it and see what we can do.

Mr. Myers?

Mr. MYERS. Thank you.

Mr. LEHMAN. Very good.

Mr. DURBIN. Thank you very much, Mr. Lehman.

[The statement follows:]

ORAL STATEMENT BY RICHARD H. LEHMAN

TO

THE HOUSE APPROPRIATIONS SUBCOMMITTEE

ON

RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES

SAN JOAQUIN VALLEY PM10 CLEAN AIR STUDY

AND

WETLANDS PROTECTION

April 20, 1993

MR. CHAIRMAN: I appreciate this opportunity to testify. My request before the Subcommittee today is for $1 million dollars to continue a vital clean air study in the Central Valley of California relating to particulate matter or PM10. I ask this of the Agriculture Subcommittee because the ag. community in my district and across the country has a vested interest in how PM10 clean air regulations are attained.

Last year, Congressman Fazio and I were successful in obtaining $1.4 million dollars from the EPA budget for this study. While a similar request was made of this Subcommittee, deep budget cuts in the last Congress prevented USDA from contributing. Phase I of the study began as a result of a $250,000 grant provided by EPA in 1990 and is expected to be presented to the San Joaquin Valley Air Board in May 1993.

I would like to emphasize that this study has broad-based support from the federal, state, and local governments, private industry, public, and other organizations. It's importance cannot be over-emphasized. The San Joaquin Valley and surrounding regions exceed both the national and state standards for PM10. This adverse air quality has the potential to cause health impacts to the more than 3 million people living in the region, reduce visibility, and impact the quality of life.

The 1990 federal Clean Air Act Amendments require that the San Joaquin Valley attain the federal PM10 standards by December 31, 2001. There are many gaps in our current understanding of the amount each source contributes to the overall problem. This impacts agriculture with regard to tilling practices, off-road use, and storage. Without an understanding of who contributes to the problem and how much they contribute, we cannot accurately assign mitigation measures and risk unfairly distributing the burden among the different industries without really solving the problem.

The San Joaquin PM10 study will provide such information. At the same time, it will serve as a model for studies in other areas of the country that experience similar problems.

I have outlined the long-term costs in my written statement. I just want to point out that the continued success of this study is dependent upon the degree of federal commitment it receives.

EPA alone can not provide the necessary funding. Nor should the federal government. Both state and private dollars are expected to be contributed as well. The agricultural community alone is expected to generate $2.5 million over the next five years for this study.

Consequently, I respectfully request that an appropriation of $1 million be included in this year's Rural Development, Agriculture, and Related Agencies appropriation. This request has the support of myself and your esteemed colleague on the Appropriations Committee, Congressman Vic Fazio.

I would also like to express my support for the President's recommended funding of the Wetlands Reserve Program. This program provides a distinct benefit to fish and wildlife as well as farmers, especially those I represent in California's Central Valley. The program provides landowners the opportunity to contribute already farmed land to the federal government to serve as valuable wetland habitat for waterfowl in the Pacific Flyway. I hope an adequate amount of these funds, if appropriated, goes to qualified landowners in California, since California is such a valuable part of the Pacific Flyway.

Mr. Chairman, I greatly appreciate your consideration and that of your subcommittee colleagues of these requests. I would be happy to provide any additional information which might be useful to you.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

WITNESS

RUSSELL JASPAR, AMERICAN HORSE PROTECTION ASSOCIATION

Mr. DURBIN. Russell Gaspar. With the American Horse Protection Association.

Mr. GASPAR. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, I am here on behalf of the American Horse Protection Association, which is a non-profit humane organization dedicated to the welfare of horses.

We are here to discuss the appropriation for APHIS, the regulatory enforcement in animal care staff, for the Horse Protection Act Enforcement Program.

A.H.P.A. has been interested in the proper enforcement of the Horse Protection Act for as long as it has been law since 1970 and, in fact, was interested in the problem of show horse abuse and, in particular, the abuse of gaited breeds such as the Tennessee Walking Horse, for a number of years before 1970.

R.E.A.C. funding for this program has been at the level of about $360,000 for the last several years and effective spending has been at about that level for almost all of the 1980s and early 1990s. The total authorization under the bill is only $500,000, either $500,000 or $360,000 is in our view inadequate to provide adequate funding for the program which is responsible to enforce the law at more than 500 shows and horse sales during the course of each year.

However, given the limitation on the authorization, we are asking that the appropriation this year be $500,000 for these reasons.

R.E.A.C. typically has been able to attend only about 25 percent of the shows and sales that are covered by the principal enforcement focus of the act, and even at that 25 percent it does not attend many of them for purposes of actually enforcing the act itself. It simply goes there for the purpose of monitoring the activities of the horse industry based enforcement program.

In our view, it is important to get more Agriculture Department enforcement in the field at horse shows for several reasons.

First and foremost, the industry's self-policing system does not have any effective penalties in it and it does not work as an effective deterrent to soring horses using painful training methods to alter their gait.

Second, APHIS statistics over the years have demonstrated time and time again that industry enforcement is much better, turns down more horses and identifies more horses as sore when APHIS personnel are in the field.

Therefore, because field enforcement is such an important part of this program, we believe that additional money is necessary in order to get more APHIS VMOs and enforcement people at horse shows where they can observe what is going on and enforce the law.

Secondly, we would ask the subcommittee not to continue language that was in the fiscal '93 bill, language that restricted spending and directed the department to discontinue the practice of

using digital palpation of the horses legs as the sole diagnostic test for soring.

Mr. Chairman, we believe that that is a restriction based on a false premise, first of all. The Agriculture Department never restricted its enforcement diagnostic tests to digital palpation. It is a little bit like the when did you stop beating your wife question. APHIS never was doing what Congress told it not to do.

Secondly, there is an unfortunate potential taint that accompanies that language to the evidence that is obtained through digital palpation which is often the most important evidence that a horse has been sored in violation of the act.

And, third, over the last couple of show seasons, there has been increasing friction between APHIS personnel and horse exhibitors and horse industry organization people in the field involving arguments about whether or not APHIS judgments about the soreness of a horse are correct and we believe that this provides just yet another verbal weapon in this ongoing pushing and shoving as to how the law is enforced. We believe that APHIS personnel have done a good job generally enforcing the law over the last several years and that they ought to be allowed to continue that good job.

For that reason, we would ask that this year's bill contain a $500,000 appropriation for the Horse Protection Act and that the restrictive language from last year be dropped.

Thank you, sir.

Mr. DURBIN. What authority does APHIS have under this act if they find someone is in fact abusing a horse or doing something in this soring process that is unacceptable?

Mr. GASPAR. There are two principal enforcement mechanisms. The first is a civil penalty mechanism that can result in the suspension of a trainer or exhibitor from showing his horse and the imposition of a fine. For more serious offenses, there is a criminal provision.

Mr. DURBIN. And what is the incidence of either of those?

Mr. GASPAR. The criminal provisions are very rarely used. They are usually for multiple offenders and I do not believe there have been many instances in which criminal charges actually have been brought.

The rate of civil offenses varies from year to year, partly as a function of the number of shows that APHIS vets attend. At a given show, there might be no civil offense written up by USDA vets. There might be anywhere up to a dozen or 20 if it is a big show and lots of problems.

Mr. DURBIN. Between 12 and 20 written up for each show?

Mr. GASPAR. In a particular show. Potentially. Yes.

Mr. DURBIN. And how many shows do they cover?

Mr. GASPAR. Again, that varies a little bit from year to year. Normally, there are about 500 shows and sales that they could potentially cover and normally they get to somewhere around 120 to 140. Again, not always in an enforcement role, sometimes just in a role of observing the industry enforcement program.

Mr. DURBIN. Well, here is what I am driving at. There seems to be an element missing. We wrote the law, we put in the penalties. You are coming in and asking for more personnel to make the inspections. I understand how that could be a deterrent but enforce-

ment of the law is also a deterrent and if APHIS were in fact enforcing this law from the civil or criminal side and the people involved in it knew that they were serious about it, you would not need as many cops on the beat because I think folks would take the law a little more seriously. But it just surprises me to find that this continues to be a problem.

Mr. GASPAR. Well, it has been a very frustrating problem from the perspective of my organization as well because there seems to be a fairly persistent undercurrent of this problem in the walking horse industry and some of the related breeds.

APHIS has done a good job in the last couple of years trying to do better on the ground enforcement and, unfortunately, one of the products of its attempts for better on the ground enforcement has been an increase in friction between APHIS personnel and horse show personnel.

I think within the last couple of years APHIS has been more serious about enforcing the act and I think there has been some deterrent impact from that seriousness. What we do not want to see lost is the momentum that seems to have started and we believe that APHIS presence at horse shows is still not at the level to provide enough of a consistent year in, year out deterrence to make the law work as well as Congress intended and that the restrictive language in the bill from last year was unfortunately a signal that undercut APHIS's deterrent ability, enforcement ability.

Mr. DURBIN. Are there any user fees involved in this?

Mr. GASPAR. I do not believe there are. The industry's self-policing mechanism does charge a fee for the designated qualified persons who attend on behalf of the industry but I do not believe there is an independent Agriculture Department fee.

Mr. DURBIN. Well, I recall this issue because the last time it came around I did not realize there were so many people who were interested in these horses, the style of horse. But they sure let it be known that they did not want APHIS enforcing it.

Mr. GASPAR. Well, it is unfortunate but true that APHIS's attempts to enforce better triggered that response.

Mr. DURBIN. What you are saying is they put chemicals on the horse's hooves?

Mr. GASPAR. The soring mechanism is essentially two-part mechanism. It is the irritation of the pastern, the area just above the hoof, and the front legs usually.

Mr. DURBIN. So when these horses are prancing it is because they are in pain.

Mr. GASPAR. Yes.

Mr. DURBIN. Is that always the case?

Mr. GASPAR. Not always the case. There are some walking horses that are naturally talented and can do the gait without these artificial enhancements. But many cannot or many cannot do it well enough to be a truly competitive animal for show purposes. So it is the combination of the irritation of the pastern area and the mechanical impact of the action device, the chain that is worn on the lower leg striking the irritated area, that helps produce the lift and the extension in the front end of the gait.

Mr. DURBIN. The chain is just used to prepare for the show, is it not?

Mr. GASPAR. No, it is used both in training and on the show grounds. The walking horse is the only show breed that is allowed to show wearing action devices. All of the other gaited breeds, Morgans, National Show horses, Saddlebreds, occasionally will train using a light chain but once they get into the show ring, the AHSA rules prohibit them from using the action device in the show ring.

Mr. DURBIN. Thank you.

Mr. Myers?

Mr. MYERS. The five-gait, you are not concerned about the training of five-gaited horses?

Mr. GASPAR. We have occasionally heard complaints about five-gaited Saddlebreds.

Mr. MYERS. They use chains, do they not?

Mr. GASPAR. To train, yes, sir. But not in the show ring. The incidence of abuse there seems to be very significantly lower, partially because they cannot use chains in the show ring and partially because the five-gaited horse trots. It has that diagonal movement.

Mr. MYERS. It has five gaits. Trot is one of the gaits.

Mr. GASPAR. Yes, that is right. And all of the experts that we have consulted say that a horse that is sored will never trot properly.

Mr. MYERS. The rack is where you get——

Mr. GASPAR. Yes, sir.

Mr. MYERS. Which is similar to the Tennessee walker.

Mr. GASPAR. Similar, but not identical.

Mr. MYERS. The gait is similar.

Mr. GASPAR. Yes. But it is the presence of the trot in addition to the rack that appears to make it less likely that a five-gaited horse will be sored because the horse would not trot if it were sored.

Mr. MYERS. Your concern is with gaited horses and not thoroughbreds, is that right? About the treatment?

Mr. GASPAR. That is correct.

Mr. MYERS. You do not concern yourself about lasics and all the—

Mr. GASPAR. Well, as an organization, we are concerned about the potential for misuse or abuse of medication in racing but the Horse Protection Act excludes competition based on speed so it is not a subject for this act.

Mr. MYERS. Okay. Thank you.

Mr. DURBIN. Thanks, Mr. Myers, and thanks, Mr. Gaspar.

Mr. GASPAR. Thank you, Mr. Chairman.

[The prepared statement follows:]

AMERICAN HORSE PROTECTION ASSOCIATION, INC.

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(202) 965-0500

THE ONLY NON-PROFIT ORGANIZATION DEDICATED TO THE WELFARE OF HORSES, BOTH WILD AND DOMESTIC.

Before the

SUBCOMMITTEE ON AGRICULTURE

of the

HOUSE COMMITTEE ON APPROPRIATIONS

Statement of the American Horse Protection Association, Inc.
Concerning Fiscal Year 1994 Appropriations
For the Animal and Plant Health Inspection Service

April 20, 1993

Before the

SUBCOMMITTEE ON AGRICULTURE

of the

HOUSE COMMITTEE ON APPROPRIATIONS

Statement of the American Horse Protection Association, Inc.
Concerning Fiscal Year 1994 Appropriations
For the Animal and Plant Health Inspection Service

The American Horse Protection Association, Inc., appreciates this opportunity to offer its views concerning the Fiscal Year 1994 appropriation for the Horse Protection Act program administered by the Animal and Plant Health Inspection Service and its Regulatory Enforcement and Animal Care staff. AHPA is a national nonprofit humane organization dedicated to the welfare of horses. Since the Association's incorporation in 1966, the prevention of abuse to show horses, and in particular Tennessee Walking Horses and similar gaited breeds, has been one of its principal areas of interest and concern.

The appropriation for the Horse Protection Act program has been $358,000 for the past three years. This is well below the authorized level of $500,000[1], and is exceedingly low in absolute terms for a program which is responsible for enforcing the Act at approximately 500 horse shows and sales per year.

AHPA recommends that the FY 1994 appropriation be increased to the full $500,000, for the reasons set forth below.

Concern for show horse abuse -- particularly among Tennessee Walking Horses -- led Congress to pass the Horse Protection Act in 1970. Pub. L. No. 91-570, 15 U.S.C. §1821 et seq. "Soring", as the abuse is commonly known, involves the infliction of pain to the horse's feet and legs to accentuate its naturally animated gait and to hasten the training process. The Act was substantially amended in 1976 to expand the kinds of conduct that

[1] The authorized funding was enacted in 1976; time and inflation have reduced it to a wholly inadequate amount. As a practical matter, the effective level of HPA enforcement expenditures has remained at approximately $350,000 per year since the early 1980s. While organizational changes within APHIS have improved the quality of the enforcement program over the last three years, the amount of money available remains woefully inadequate.

were prohibited and to strengthen the Agriculture Department's enforcement capabilities. Pub. L. No. 94-360.

Throughout the history of the Act, Congress and the Agriculture Department have understood that there is a close relationship between soring and the kinds of "action devices" and shoes that a horse wears, especially if the effects of the devices and shoes are accentuated by making the animal's feet and legs painful through the application of chemical irritants or blistering agents.[2] As a result, enforcement under the Act has focused in part on prohibiting the use of equipment and techniques that reasonably can be expected to sore a horse. APHIS field enforcement at horse shows is intended to detect horses that show evidence of being in pain prior to or after showing.

Field enforcement is especially important because APHIS/REAC is relying on it to break the link between chemical soring of the pastern area and the use of action devices. In a rulemaking notice published in 1989 (54 Fed. Reg. 7177) it acknowledged that any action device will cause a horse to suffer pain if it strikes an area that previously has been made sore. APHIS justified promulgating a rule that permits action devices by contending that pre-show inspections will detect and disqualify those horses that have been sored.

Unfortunately, in recent years APHIS/REAC personnel have attended only about 25 percent of the 500 or more horses shows and sales that are the principal focus of the Horse Protection Act program. Their attendance is not always for the purpose of enforcement; APHIS/REAC personnel often merely monitor the performance of Designated Qualified Persons (15 U.S.C. §1823(a)) appointed by horse show management to inspect horses, and do no inspection of their own.

The sophistication of soring techniques now in use and the limitations of current examination methods used to detect them requires a more vigorous APHIS presence at horse shows. In the early 1970s sore horses often had open wounds on their lower front legs; today, visible evidence of soring is usually absent or concealed, and horses are trained, or "stewarded", not to react to pain when their legs are examined. In addition, industry self-regulation constitutes most of the enforcement under the Act. This has produced an inconsistent pattern of detection of sore horses; DQP disqualifications rates have

[2] The most common action device is a chain which is worn bracelet-fashion around the horse's lower front legs, so that it strikes the pastern area as the horse strides. Under current regulations the weight of the chain may not exceed six ounces.

consistently been substantially higher at shows when APHIS personnel are present than they are at shows attended by DQPs alone.

This clearly suggests that an increased APHIS/REAC presence is an essential element to effective enforcement of the Act. A continuation of past levels of enforcement appropriations will do little or nothing to change the current situation. It is necessary to bring more horse shows within the scope of direct USDA enforcement, to insure that DQP inspections are adequate and to have as many horses as possible inspected by APHIS/REAC personnel. In addition, pre-and post-show examination techniques must be made more thorough and reliable to prevent the use of soring practices that have thus far largely escaped detection. Civil and criminal enforcement actions must be prosecuted more often, more vigorously and more quickly.

In this regard, AHPA requests that the Subcommittee not carry forward language from the FY 1993 appropriations bill which directed APHIS to discontinue its practice of relying on digital palpation as the only diagnostic test used to determine whether a horse is sore. This language, added last year in the Senate and acceded to by the House, is regrettably misleading. APHIS veterinarians have never relied exclusively on digital palpation to enforce the Act, although it is an important element of many soring cases.

The language was inserted in response to pressure from the Walking Horse industry, which was resisting APHIS attempts to improve field enforcement during the 1991 and 1992 show seasons. AHPA understands that harassment and verbal abuse of REAC personnel increased substantially during those years, with a clear effort to impede inspections and thereby deter proper enforcement of the Act. The Senate language suggests that Congress intended to discount the value of palpation evidence, possibly creating a taint that will adversely affect enforcement actions. Furthermore, it provides an additional weapon for exhibitors to use against APHIS VMOs at horse shows. And, as stated, these negative consequences are the product of a false premise and industry attempt to evade proper enforcement of the law.

AHPA strongly supports better and more accurate enforcement of the Act. Additional enforcement funding is essential to that end, to develop new inspection techniques (e.g., to detect whether illegal substances have been used on the horse's limbs to enhance or inhibit pain), and to purchase new detection equipment, including thermography equipment.

As long ago as 1975, APHIS concluded that thermographic detection of soring was the single most reliable and objective enforcement tool available. APHIS used the thermograph during

the late 1970s, but discontinued its use in about 1981. Since then, improvements in thermographic technology have produced more portable equipment, as well as equipment that can better record examination results on videotape or compact disc for use in evidence. Because the physical signs of soring today are often absent or disguised, thermographic measurement of the heat and inflammation indicative of injury in underlying tissues is a vital enforcement tool that must be restored to the Horse Protection Act program.

For these reasons, AHPA requests that the Subcommittee recommend a $500,000 Horse Protection Act program appropriation for Fiscal Year 1994.

BIOTECHNOLOGY CENTER AT NORTHWESTERN UNIVERSITY

WITNESS

ARNOLD R. WEBER, PRESIDENT, NORTHWESTERN UNIVERSITY

Mr. DURBIN. The president of Northwestern University was scheduled to attend and cannot, and his statement will be made part of the record.

[The information follows:]

Statement on the Biotechnology Center Facilities Proposal

Arnold R. Weber, President
Northwestern University

Testimony Submitted to the
Appropriations Subcommittee
Agriculture, Rural Development, FDA, and Related Agencies
United States House of Representatives

Mr. Chairman and distinguished Members of the Subcommittee, thank you for inviting me to testify before you. I am seeking further support of our proposal that the federal government should provide $12 million in a partnership grant, as partial funding of a $24.4 million facilities project for Northwestern University's Biotechnology Center. In FY1991, through a federal grant of $50,000 from your committee, this proposal was submitted to and approved by a feasibility study of the United States Department of Agriculture (USDA) Cooperative State Research Service. In FY1992 and FY1993 respectively, federal grants of $582,000 and $501,490 for initial construction were of great importance in advancing this project. Let me take this opportunity to express my gratitude for your past support, to outline the progress that has resulted at the Biotechnology Center, and to urge that you complete the federal portion of the project costs during the fiscal years 1994 and 1995.

Northwestern's Biotechnology Center project has two components, designed to create state-of-the-art facilities for biotechnology research, training, and technology transfer. A new $18 million life science research building is being constructed for biotechnology scientists in the two Departments of Biochemistry, Molecular Biology, and Cell Biology and of Neurobiology and Physiology. A $5.8 million renovation of laboratories and related research space in the Technological Institute Building will be made available to biotechnology scientists in the three Departments of Chemistry, Chemical Engineering, and Biomedical Engineering. A utilities tunnel for these two facilities, costing $600,000, brings the project total to $24.4 million. Because of our pressing need for research laboratories, officials of the Cooperative State Research Service have agreed to, and we have proceeded with, construction of the new space through a combination of privately raised funding and debt financing.

The mission of Northwestern's Biotechnology Center is to increase research support and integrate multidisciplinary research programs, to provide an educational focus for the training of biotechnology scientists and administrators, and to enhance industry interaction and technology transfer. When I spoke previously before this Subcommittee, I gave a detailed history of Northwestern's industry linkages, graduate programs, and faculty research in the area of biotechnology, including a significant record of individual and institutional awards for external support from corporate as well as government sources. Today, I want to offer some specific examples of recent progress at Northwestern in the areas of biotechnology research, education, and technology transfer. These new scientific breakthroughs, training programs, and industrial collaborations at Northwestern represent the significant potential of the Biotechnology Center to increase competitiveness and to create jobs in the nation's agriculture and agriculture-related industries.

<u>Animal Development and Genetics</u>. In the past, impressive improvements in the quality of the nation's livestock were achieved through careful breeding programs. However, biotechnology now offers a faster, more direct method to achieve additional progress.

Through biotechnology, new or altered genes may be introduced into an animal, leading to the increased production of some vital genetic component: a hormone that controls the rate of animal growth; an enzyme that allows animals to utilize plentiful or inexpensive feed; or a protein to fight infection from a virus. To enhance the possibilities that biotechnology offers, these genes must be delivered into animals efficiently and become "active" in the appropriate tissues and organs.

During the past year, there have been notable advances in this area. For example, Professor Kelly Mayo has achieved the first cloning of the receptor for the growth hormone-releasing hormone -- a critical regulator of animal growth, which is also of interest for human health. In addition, Professor Richard Morimoto has discovered a family of transcription factors that regulate stress responsive changes in gene expression within various organisms, ranging in complexity from microscopic bacteria to large mammals. Professor Doug Engel has discovered a second family of transcription factors controlling the genetic program activated during blood cell differentiation. The identification of these two families of factors provides the molecular tools to enhance or repress the expression of desirable or undesirable traits in agriculturally important organisms.

Drugs, Vaccines, and Disease and Pest Control. Prevention and control of disease in animals is a prominent subject of research for Northwestern University immunologists and virologists. Infectious agents such as bacteria and viruses can cause severe agricultural and economic damage. For instance, the 1983 outbreak of chicken influenza virus in Pennsylvania caused the death (or destruction to stop the spread of the disease) of tens of millions of chickens. More recently, the spread of bovine spongiform encephalopathy (mad cow disease) in Great Britain provided another example of how an unanticipated disease can cause a major disruption in a nation's food supply and economy. Infection by influenza virus is particularly difficult to prevent because of the speed with which the virus can change to escape an animal's immune system. The key to stopping a virus is identifying its vulnerabilities. For example, there is a small viral protein that is absolutely essential for virus infection and that cannot change as rapidly as the other parts of the virus.

A recent scientific collaboration between the Northwestern laboratories of Professors Robert Lamb and Lawrence Pinto may have identified the "Achilles Heel" of this influenza virus. These investigators have found a small viral protein that punches holes in the surface of cells, allowing charged atoms to move into and out of the cells. This discovery explains, for the first time, how the influenza class of viruses is able to release genetic information after entry into a cell and how newly produced viruses in the infected cell are able to assemble from their component parts. This finding also explains how the anti-viral drug

amantadine works, and will enable the rational design of new and more effective anti-influenza virus pharmaceuticals.

Plant Productivity. Because plant growth is limited by available nutrients in the ground, large amounts of fertilizers are utilized in agriculture. One of the most important nutrients in these fertilizers is potassium since low potassium levels in the soil severely retard plant growth. As an alternative to adding expensive fertilizers to crops, biotechnology offers the possibility of creating new strains of agriculturally important plants (such as corn) that can grow in the presence of smaller amounts of potassium. To achieve this goal, plants must be engineered to extract potassium more efficiently from the soil.

Professor Richard Gaber and his colleagues at Northwestern were the first to isolate the gene responsible for bringing potassium into plant cells, and have recently discovered how this potassium channel operates. This gene can now be redesigned in the laboratory so that it is much more active, and then reintroduced into plants. Such an "over-active" gene would lead to the production of more of this potassium-uptake protein in the plant, enabling the plant to retrieve potassium more efficiently from the soil. It is also possible to restrict the area of the plant in which this modified gene is active. This technique could allow more potassium transport only into the roots, which distribute this nutrient to the rest of the plant. In the other parts of the plant, the potassium would be transported to the inside of the individual cells at normal rather than excessive levels.

Training Programs. In the fall of 1992, the first class enrolled in the new Master's Program in Biotechnology. This program offers an interdisciplinary approach to the study of biotechnology, including science courses, business courses, laboratory research at Northwestern, and industrial internships. The students applying to this program are highly qualified bachelors in science or engineering. The graduates from this program will be uniquely qualified to meet the nation's growing need for trained scientists in the biotechnology industries. In the spring of 1992, the National Institutes of Health (NIH) conducted a favorable site visit regarding a proposal, currently pending, for support in the creation of a new Ph.D. Program in Biotechnology. Novel aspects of this program will include: an interdisciplinary core of course requirements, plus specialization in one department; close collaboration of faculty and students from many disciplines; exposure to research laboratories in several disciplines through short-term residences; multi-disciplinary doctoral thesis committees; attendance at regular biotechnology seminars and other interdisciplinary research group meetings; and systematic exposure to industrial biotechnology through research internships. Graduates will be more effectively prepared to fill the growing number of research positions at biotechnology companies, as well as university and government laboratories.

Technology Transfer. In addition to the Master's and Ph.D. programs, the Biotechnology Center engages in numerous other forms of technology transfer, notably in the two areas of food/agriculture and biomass/bioremediation. For example, in the fall of 1992, the Center hosted a one-day seminar on recent trends in biotechnology, targeted to corporate managers of companies in the food/agriculture or environmental protection fields. In the summer of 1992, the Center organized and chaired a national symposium on "pharming" (i.e., the use of genetically engineered livestock and plants to produce high-value products) for the Society for Industrial Microbiology. In January of 1993, the Center was selected and funded by the Midwest Plant Biotechnology Consortium to organize Chicago-area university, industry, and government resources in order to solve important regional and national problems in bioremediation and waste conversion. This project will involve first the identification and profiling of academic, corporate, and governmental researchers with relevant expertise and organizations with vested interest in this area. Then the project will establish a seminar series to engage those identified in a dialogue that will select the problems most important to be targeted and the solutions most likely to be productive.

In conclusion, I would like to thank you and your Subcommittee for the construction funding to date of just over $1 million. Our original request in 1990 was for $12 million in federal partnership funding. Northwestern has already raised almost all of its $12.4 million share from private funds and has made good progress in construction. Mr. Chairman, knowing your difficult budgetary constraints this year, I nevertheless request that the remaining federal portion be granted in FY1994 and FY1995 so that the progress of Northwestern's Biotechnology Center, such as I have outlined today, can continue. Unless the federal funding is significantly accelerated, there will be further cost increases for the project, and there will be further delays in completion of the much needed state-of-the-art laboratories for Northwestern's Biotechnology Center. If that happens, top-rated faculty may leave or refuse to come when recruited, seriously compromising the continuation and expansion of the Biotechnology Center's high quality research, training, and technology transfer. Therefore, I specifically request that approximately $5.45 million be made available in FY1994. Thank you, Mr. Chairman.

DISTANCE LEARNING AND MEDICAL LINK PROGRAM

WITNESS

JOSEPH J. D'AMICO, COUNCIL FOR EDUCATIONAL DEVELOPMENT AND RESEARCH

Mr. DURBIN. Mr. Joseph D'Amico, Council on Educational Development and Research.

Mr. D'AMICO. Thank you, Mr. Chairman.

Mr. DURBIN. Thank you for joining us.

Mr. D'AMICO. Thank you for the opportunity.

I am Joe D'Amico and I am Director of the Rural Education Program at the North Central Regional Educational Laboratory or NCREL. NCREL is the regional laboratory that serves the states of Illinois, Iowa, Indiana, Ohio, Minnesota, Michigan and Wisconsin. I am here today on behalf of the Council for Educational Development and Research.

The Council's membership includes the congressionally-mandated national network of ten regional educational laboratories in some of the foremost educational R&D centers in this country.

The regional laboratories develop new teaching and learning strategies for America's schools. We test them and when they work we disseminate them to others. They are at the federal level the closest thing educators have to the national system of agricultural extension agents.

Each laboratory targets at least a quarter of its program funds specifically for rural schools and rural children, hence our interest in the Rural Electrification Administration's Distance Learning and Medical Link Program.

We know that rural schools and their communities need a program that will maintain their access to the emerging rapidly changing world of communications.

Mr. Chairman, we urge you to continue to fund this vital program in fiscal year 1994 at a level of at least $25 million. The demand for this program is high. The REA expects over 500 funding requests by the end of this month. At $500,000 per project, which is the ceiling for individual projects, the demand for funding the program is already at about $250 million.

America's rural communities are at a crossroads and our national leaders have a choice as to which path to take. One path continues the direction of the last decade. It leads to wider and wider disparities in educational opportunities between rural kids and urban kids. It leads to fewer economic opportunities for rural adults and poorer health care for all rural citizens.

But our leaders can take another path. This path builds on the traditional strengths of rural communities, their resilience, their spirit of innovation and determination to succeed and it looks to the future.

In President Clinton's book, "Putting People First," he expressed a vision for communications in this nation. It was to create a door-to-door information network to every home, business, lab, classroom and library by the year 2015. This vision would place public records, data bases, libraries and educational materials on line for public use to expand access to information.

Mr. Chairman, in its wisdom, this subcommittee started implementation of President Clinton's goal by funding this program two years before he came to office.

My expertise is rural schools and I would like to address the remainder of my remarks to the educational applications of the Distance Learning and Medical Link Program.

Information will be the new lifeblood of rural communities. Access to information determines their quality of life and their economic health. And in rural communities, the entity that is the most widespread purveyor of information is the school. Rural schools are responsible for educating 6.6 million of our nation's children. They are often the glue that holds rural communities together.

Without strong schools, businesses will not move to rural areas. Joblessness will climb even higher and rural communities will wither.

Opportunities for these 6.6 million school children will be severely limited. Many of the most talented will move out and the economic vitality of our rural communities will face still another setback.

Let me tell you how technology financed through this program can expand these students' educational opportunities.

Technology can give rural teachers access to the most recent information on school reform and do it a lot cheaper than our present way of helping rural schools, which is to get into a car and drive 200 or more miles.

The regional educational laboratories and R&D centers have a wealth of information and assistance they are ready to share with rural educators: teacher training programs, improved educational strategies, ways to strengthen even more the bonds between rural schools and community.

The problem is the costs incurred in getting these ideas there. I know from my own experience, not to mention the mileage on my car.

By simply placing computers and modems into rural schools, rural students can have access to Internet, an international interactive system of data bases and communication. Isolation, a common characteristic of rural life becomes a thing of the past as these students are able to do research in the world's top research libraries or correspond with scientists and other experts.

Through NASA's Space Link they can even check on the daily progress of the experiments our astronauts are doing in space.

Through interactive two-way video, teachers and students in different sites can see and hear each other. This distance learning technology can bring advanced mathematics and science courses and languages such as Russian, Japanese and Arabic to schools too small to support teachers in these subjects.

Some of the most exciting technological developments for education today are in interactive multimedia. Just imagine how vivid the muscles in the human body become to an 11-year-old who on her computer terminal can see and duplicate for herself the steps of an actual surgical procedure.

Yet neglect, constant budget cutting and community upheavals have put severe limitations on rural schools' finances. Rural schools cannot afford these innovations without your support.

Mr. Chairman and members of the subcommittee, the regional educational laboratories take a lot of pride in the Distance Learning and Medical Link Program. We advised Congress on including this type of authorization in the 1990 Farm Bill. We have commented extensively on REA's proposed regulations and we have made our extensive background available to you during the appropriations process. Now that funding is in place and the regulations are final, we are ready to make real progress.

We have found that the dynamic of communications through technology is sometimes difficult to explain. But we know that once the communications infrastructure is there the real world takes over and exciting things happen.

My efforts to illustrate the benefits of modern communications infrastructure for rural communities are limited both by my own imagination and by my language, just as if I were to say that the benefits of the interstate highway system were merely to facilitate the movement of people and products.

Look at the way rural economic development is spurred by that interstate highway system has increased in practically every intersection in the last 30 years. Look at the millions of people who have visited the Grand Canyon, the California redwoods or Williamsburg, Virginia on that interstate system. Look at how the interstate highways improved access to health care, to farm markets and to colleges.

It is even more difficult to enumerate the long term benefits which will flow from a first-class telecommunications system for rural America. It really could help rebalance the scale.

Let me close by again urging the subcommittee to continue funding the REA's Distance Learning and Medical Link Program at $25 million for fiscal year 1994. That is not a grand amount but you will see great results.

The REA is an agency which has proven time and again its ability to get a job done at very little real cost to taxpayers. Through the Distance Learning and Medical Link Program, it can have the opportunity to do that again.

Thank you.

Mr. DURBIN. Thank you for your testimony.

I believe that the Clinton budget has asked for a little over $5 million for the next fiscal year, which is far short of your request but we share your interest in this and we will try to do our best and see if we can find some funding for it.

It is a program which I believe, as you have testified, could have a very positive impact in rural areas.

Thank you.

Mr. Myers?

Mr. MYERS. I have visited some rural areas where we have these computers. In fact, last Friday, I spent a day visiting. We have the Buddy System. Are you familiar with the Buddy System?

Mr. D'AMICO. Yes. In Indiana. Sure.

Mr. MYERS. Yes. We have the Buddy System there. Quite a few. Quite few rural schools have them.

Mr. D'AMICO. Yes.

Mr. MYERS. The other day—I have to tell this story. A little kid, a fourth grader, 120 words a minute. Can you imagine typing——

Mr. D'AMICO. That is astonishing.

Mr. MYERS. Well, I was a senior in high school and I was still using two fingers and here this little kid—I finally learned how to type but it is tremendous. It really is.

Mr. DURBIN. Were there short words?

Mr. MYERS. Well, surprisingly, she put in this link up—what do they call it in Indiana, it is a down link or something they call it in Indiana, they do not call it the same but anyway she typed in "We have a guest" just real fast.

"Who is your guest?"

"Congressman Myers." She spelled my name right; the teacher could not.

Mr. DURBIN. There is a lesson there.

Thank you very much for joining us.

Mr. D'AMICO. Thank you.

[The prepared statement follows:]

COUNCIL FOR EDUCATIONAL DEVELOPMENT AND RESEARCH

Testimony on the Distance Learning and Medical Link Program

by

Joseph J. D'Amico
Director, Rural Education Program
North Central Regional Educational Laboratory
on behalf of the
Council for Educational Development and Research

before the

Agriculture, Rural Development, Food and Drug Administration, and Related Agencies
Subcommittee on Appropriations

of the
House Committee on Appropriations

Room 2362
Rayburn House Office Building

April 20, 1993
5:00 p.m.

1001 E Street N.W. • Suite 601 • Washington, D.C. 20036 • (202) 223-1593
Dena C. Stoner, Executive Director

My name is Joseph D'Amico. I am director of the rural education program at North Central Regional Educational Laboratory (NCREL). NCREL is the regional laboratory that serves the states of Illinois, Indiana, Iowa, Ohio, Michigan, Minnesota, and Wisconsin.

Thank you for this opportunity to express support for the Distance Learning and Medical Link Program.

I am here today on behalf of the Council for Educational Development and Research. The Council's membership includes the Congressionally mandated national network of 10 regional educational laboratories and some of the foremost educational R&D centers in this country.

The regional laboratories develop new teaching and learning strategies for America's schools, test them, and when they work, disseminate them to others. They are, at the federal level, the closest thing educators have to the national system of agricultural extension agents.

Each laboratory targets at least a quarter of its program funds specifically for rural schools and rural children; hence our interest in the Rural Electrification Administration's Distance Learning and Medical Link Program. We know that rural schools and their communities need a program that will maintain their access to the emerging, rapidly changing world of communications.

The Distance Learning and Medical Link Program was authorized in the 1990 Food, Agriculture, Conservation and Trade Act to enhance the economic viability of rural communities. To accomplish this goal, the program makes

grants to rural facilities such as schools, hospital, and medical centers for the purchase or lease of advanced telecommunications and computer networks.

The funding can be used for telecommunications terminal equipment, computer hardware and software, data terminal equipment, fiber-optic cable, interactive video equipment, and the like.

On February 26, 1993, REA issued final regulations. The agency is in the process of selecting appropriate project recipients for the $10 million appropriations currently available.

Mr. Chairman, we urge you to continue to fund this vital program in FY 94 at a level of at least $25 million.

The demand for this program is high. REA staff have responded to roughly 3,000 inquiries about the present Distance Learning and Medical Link Program funds. The agency expects over 500 funding requests when applications for those funds are due at the end of this month. At $500,000 per project, which is the ceiling for individual projects, the demand for funding the Distance Learning and Medical Link Program is at $250 million.

Quite truthfully, I'm embarrassed to ask for only $25 million for FY 94. But we feel we would be irresponsible if we did not keep our other eye of the federal deficit.

America's rural communities are at a crossroads. Our national leaders have to decide which path to take. One path continues the direction of the last decade. It leads to wider and wider disparities in educational opportunities between rural kids and urban kids, it leads to fewer economic opportunities for rural adults, and poorer health care for all rural citizens.

But our leaders can take the other path. This path builds on the traditional strengths of rural communities, yet looks to the future.

Through Congressional leadership, the REA has embarked on a very positive path to the future for rural America. It is a tiny first step, but the REA's Distance Learning and Medical Link Program will show us the way.

In President Clinton's book, Putting People First, he expressed a vision for communications in this nation. It was to create a door-to-door information network to every home, business, lab, classroom, and library by the year 2015. This vision would place public records, databases, libraries, and educational materials on-line for public use to expand access to information. Mr. Chairman, in its wisdom, this Subcommittee started implementation of President Clinton's goal by funding this program two years before he came to office.

My expertise is in rural schools, and so I would like to address the remainder of my remarks to the educational applications of the Distance Learning and Medical Link Program.

Information will be the new life-blood of rural communities. Access to information determines their quality of life and their economic health. And in rural communities, the entity that is the most widespread conveyer of information is the school.

Rural schools are responsible for educating 6.6 million of our nation's children. They are often the glue that holds rural communities together. Without strong schools, businesses will not move to rural areas, joblessness will climb even higher, and rural communities will wither. Opportunities for these 6.6 million schoolchildren will be severely limited. Many of the most talented will move out, and the economic viability of our rural communities will face still another setback!

Let me tell you how technology financed through this program can expand these students' educational opportunities.

Technology can give rural teachers access to the most recent information on school reform and do it a lot cheaper than our present way of helping rural schools -- which is to get into the car and drive 200 miles. The regional

educational laboratories and R&D centers have a wealth of information and assistance that they are ready to share with rural educators -- teacher training programs, improved instructional strategies, ways to strengthen even more the bonds between rural schools and communities. The problem is the costs incurred in getting these ideas there. I know that from my own experience -- not to mention the milage on my car.

By simply placing computers and modems into rural schools, rural students can have access to Internet -- an international, interactive system of data bases and communication. Isolation, one common characteristic of rural life, becomes a thing of the past as students do research in the world's top research libraries or correspond with scientists and other experts. Through NASA's SpaceLink they can even check on the daily status of experiments our astronauts are doing in space.

Through interactive two-way video teachers and students in different sites can see and hear each other. This distance learning technology can bring advanced mathematics and science courses, and languages such as Russian, Japanese, and Arabic, to schools too small to support teachers in these subjects.

Some of the most exciting technological developments for education today are in interactive multimedia. Just imagine how vivid the muscles in the human body become to an eleven year old who, on her computer terminal, can see and duplicate for herself the steps of an actual surgical procedure.

Yet neglect, constant budget cutting, and community upheavals have put severe limitations on rural schools' finances. Rural schools can not afford these innovations without your support.

Mr. Chairman and Members of the Subcommittee, the regional educational laboratories take a lot of pride in the Distance Learning and Medical Link Program. We advised Congress on including this type of authorization in the 1990 Farm Bill. We have commented extensively on REA's proposed regulations and we have made our extensive background available to you

during the appropriations process. Now that funding is in place and the regulations are final, we are ready to make real progress.

We have found that the dynamic of communications through technology is sometimes difficult to explain. But we know that once the communications infrastructure is there, the real world takes over and exciting things happen. My efforts to illustrate the benefits of a modern communications infrastructure for rural communities are limited both by my imagination and my language. For instance, to say that the benefits of the Interstate Highway System were merely to facilitate the movement of people and products would be a vast understatement.

> Look at the rural economic development spurred by that system at practically every intersection in the last 30 years.
>
> Look at the millions of people who have visited the Grand Canyon, the California redwoods, or Williamsburg, Virginia.
>
> Look at how the interstate highways improved access to health care, to farm markets, and to college.

It is even more difficult to enumerate the long-term benefits which will flow from a first class telecommunications system for rural America. It really could help to re-balance the scale.

Let me close by again urging this Subcommittee to continue funding the REA's Distance Learning and Medical Link Program at $25 million for FY 1994. That is not a grand amount, but you will see great results.

The REA is an agency which has proven time and again its ability to get a job done at very little real cost to taxpayers. Through the Distance Learning and Medical Link Program, it can have the opportunity to do that again.

Thank you.

SOYBEAN CYST NEMATODE RESEARCH

WITNESS

HON. BILL EMERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Mr. DURBIN. Mr. Emerson from Missouri.

Mr. EMERSON. Which is under deep water these days.

Mr. MYERS. I cannot help you any, Bill. I have the same water, sending it down to you.

Mr. EMERSON. Yes, I know.

Mr. Chairman, thank you.

Mr. DURBIN. We are going to put your entire statement, every word of it, in the record.

Mr. EMERSON. Thank you. I appreciate it.

Mr. DURBIN. We welcome your testimony.

Mr. EMERSON. Thank you, Mr. Chairman, and John. If you are putting my statement in the record, I will not repeat it all here but we have been doing at the Delta Research Center in Portageville, Missouri, which is a major agricultural research facility at the University of Missouri, very important soybean cyst nematode research for as long as I can remember. And this is a primary research effort.

I might point out that no administration has ever requested funding for it, so this is not a new request I am making but every year since I have been in Congress this subcommittee has seen fit—recognizes the problem and has seen fit to make available a very modest amount of money for the ongoing efforts to stay ahead of the soybean nematode. This a little pest that attaches itself to the root of the soybean plant.

Mr. Chairman, anticipating a question that you might ask me, we determined that in Illinois in 1992 the cost to soybean producers was estimated to be at about $82 million in lost soybean yields on account of this little critter, the soybean cyst nematode.

It is a major problem in every state that grows soybeans and I earnestly solicit what I do consider to be this modest amount. The last several years, we have been getting in the neighborhood of $380,000 and if we could continue that, it is a very productive research effort. I sometimes think I ought to ask for a whole lot more and then quit coming.

What we are able to do with the funding that we get is sort of to stay abreast of efforts to keep this nematode under control but we have never been able to get the total jump and get ahead of it. If we ever have a day of balanced budgets and a little extra money laying around, I would like to ask for a lot more money to lick this problem all together.

But with the money that we do get, it is very helpful. What they are able to do is develop year to year ever new resistant strains of soybeans to this nematode and that is sort of how they stay ahead of it. The nematode problem has not been licked. These little rascals find out how to penetrate the resistant varieties, too, but at least we are able to help in the effort to hold down the costs to the producer in depressed yield.

I will submit my statement for the record and be glad to try to answer any questions you may have.

Mr. DURBIN. Congressman Emerson, I just do not profess to have any scientific expertise but we through some of our research labs are developing friendly nematodes who go in and attack the ones that do the damage. We have had that in some corn production and I do not know if it has application here but it is certainly something I am sure that the research people are looking at.

Mr. EMERSON. Yes.

Mr. DURBIN. The other thing I might mention to you is that you have been honored to have this project which we funded in the past included on the list by our friendly pork busters, our so-called Citizens Against Government Waste.

Mr. EMERSON. Yes.

Mr. DURBIN. They believe that spending $385,000 to deal with this pest is a waste of money and they would rather see $400 million worth of soybeans lost.

Mr. EMERSON. Yes.

Mr. DURBIN. And I sincerely hope that you will take a moment and meet with some of our colleagues who believe this to be wasteful spending and impress upon them how they have erred in their ways.

Mr. EMERSON. Mr. Chairman, I do that with great regularity and will be glad to redouble my efforts.

Mr. DURBIN. Thank you very much.

Mr. Myers?

Mr. MYERS. Speaking of waste, that is a waste of time, too, is it not? [Laughter.]

Mr. EMERSON. Usually.

Mr. MYERS. I am serious. You know, for some reason, the nematode does not get very much into Indiana. It does not get that far east.

Mr. EMERSON. Well, it is there.

Mr. MYERS. Almost at the state line.

Mr. DURBIN. It is Bobby Knight that scares them away.

Thank you for your comments, Bill.

Mr. EMERSON. Thank you.

[The prepared statement follows:]

BILL EMERSON
MEMBER OF CONGRESS
8TH DISTRICT, MISSOURI

HOUSE COMMITTEE ON
AGRICULTURE
HOUSE COMMITTEE ON
PUBLIC WORKS AND TRANSPORTATION

SELECT COMMITTEE ON HUNGER

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STATEMENT OF

CONGRESSMAN BILL EMERSON

BEFORE THE

HOUSE SUBCOMMITTEE ON AGRICULTURE APPROPRIATIONS

APRIL 20, 1993

Mr. Chairman, I wish to thank you for allowing me to come before your Subcommittee to speak on behalf of continued funding for cyst nematode research. Also, I want to thank you, Mr. Skeen, the Ranking Minority Member, and the other members of this Subcommittee for your help and assistance in previous years in funding this vitally important research effort.

As you know, the Delta Area Agricultural Research Center in Portageville, Missouri has been the premier national facility for extensive research on the soybean cyst nematode. Because of your subcommittee's past assistance in securing funding for this project, I know you are aware of the many benefits accruing to soybean farmers as a result of this research. Presently, scientists estimate that nearly 75 percent of the domestic farmland planted to soybeans last year was infested with the cyst nematode. Nationally, soybean producers lost an estimated 400 million dollars in 1992 due to the increased infestation of this soybean nemesis. In Illinois alone, the 1992 cost to soybean producers has been estimated at $82 million in lost soybean yields.

As these numbers show, this problem goes far beyond Missouri's state borders. Scientists in Illinois, Kentucky, Mississippi, Missouri, Nebraska, Iowa, and Indiana now view the

cyst nematode as one of their soybean growers' worst enemy. As you can see, soybean yields are continuing to decline due to this pest and that translates into diminished profits -- something both farmers and rural communities can ill afford to lose.

There are some signs of encouragement in sight for this nation's soybean farmers trying to cope with this profit destroying dilemma. Fortunately, that hope lies in the hands of the research capabilities presently available at the Delta Center. Much of the progress that has been made in the control of and eradication of cyst nematodes is a result of research conducted at the Delta Center. That progress would not have been possible without the 385 thousand dollars the Delta Center has received annually to continue its research program.

As you know, funding for cyst nematode research was not included in the Administration's budget request. In fact, the Administration has never requested funding for this program. Fortunately, Congress has always transferred funds from other accounts to allow this vital research at the Delta Center to continue. In doing so, we have been able to fund cyst nematode research without increasing the overall Agriculture budget.

Unfortunately, present research efforts have not been able

to overcome the spread of this yield endangering pest which will threaten many more hundreds of millions and potentially billions of dollars worth losses in soybean production this year and years to come. Yield losses combined with the spread of the pest prove that additional funding is necessary in order to guarantee both sustained and accelerated progress in the eradication of the cyst nematode for the next fiscal year.

Mr. Chairman, it is my hope that we can once again meet this important need without increasing total spending. If we do as we have in the past, I believe we will be saving a number of farmers from financial ruin in the long run, thus saving the federal government many times the amount we will hope to spend this year.

I urge the Subcommittee to give its approval to this request, and appreciate your providing me this opportunity to testify.

U.S. MARINE SHRIMP FARMING PROGRAM

WITNESS

THOMAS D. McILWAIN, DIRECTOR, GULF COAST RESEARCH LABORATORY

Mr. DURBIN. Tom McIlwain, Gulf Coast Research Laboratory Consortium. You have waited patiently. Thank you for joining us.

Mr. MCILWAIN. Thank you, Mr. Chairman, for the opportunity to be here.

I am Tom McIlwain. I am Director of the Gulf Coast Research Laboratory down in Gulf Coast, Mississippi. My testimony today is for the Gulf Coast Research Laboratory's Marine Shrimp Farming Program and I am submitting this on behalf of the Gulf Coast Research Laboratory, the Oceanographic Institute in Hawaii, Tufts University in Massachusetts, Texas A&M in Texas, Waddell Mariculture Center in South Carolina and the University of Arizona.

To give you a little bit of history about the consortium, it was formed in 1985 in response to a better than $2 billion trade deficit in shrimp, by marine shrimp coming into the United States. We formed this consortium to focus our efforts in research to address this problem and try to jump start the agricultural shrimp industry in the United States.

This program is based on a simple and straightforward approach. We identify technologies and products that would give us a competitive edge in the United States over our foreign producers. We have tried to enlist the help of the top research people in shrimp aquaculture in the nation to address specific problems relative to that production. And we have directed a narrowly focused research program that is results oriented and it is directed toward the industry with their support.

It is directed at improving industry profitability and provides sufficient funds to conduct the highest quality of research, development and technology transfer. We thank the committee for the $3.5 million that was afforded this program last year.

1992 has been a banner year for marine shrimp growers in the United States. U.S. production and profit levels for shrimp aquaculture set new records in 1992. The overall increase was from $2.6 million in 1991 to $4.8 million 1992, that's about a 82 percent overall increase. And this annual increase can be directly attributed to the research that has been produced by this program. Specifically, the pathogen free foodstocks that we have been able to secure and produce and reproduce and the sophisticated disease controls that have been developed by the consortium and transferred to the industry.

This program is also receiving unqualified support from the industry. I have a number of letters, I think some of them have been sent to you, from the industry and from the various states that are involved in aquaculture and also from the CRS of USDA.

The future of this industry looks bright. There are at least two new companies that are being formed this year to capitalize on and utilize the high health brood stock that have been developed by this program and then we have one new company that is being established as we speak to provide disease screening for shrimp that are being moved around the country.

We expect this industry to grow to at least $500 million in the next ten years. About $250 million of that will be in production, the other $250 million will be in the support industry producing seed stocks and disease control equipment to support this industry. The United States historically has always had an edge in technology development and that is what this program is all about.

In the United States, there have been a couple of studies done recently looking at consumer preference for seafood and shrimp continues to be the number one preference of our seafood consumers around the nation.

Another thing that we as members of the consortium are proud of, the USDA has had a very rigorous program review last year. They assembled a team of industry and other people who were interested in this program, brought them in to evaluate this program. Their results indicated that the program was very well managed, it was providing direction, encouragement and resources to investigators to solve the problems and the basic conclusion was that the consortium was making sustained progress toward the goal of industry expansion. That is what the whole program has been about.

It has also been touted as a model program for resolving important problems both in agriculture and aquaculture. The approach that we use is straightforward. We establish a goal, define the problem, develop an approach to that. Identify in a list the most qualified scientists that we can find and engineers across the nation, provide adequate funding resources to those researchers, and then we manage to ensure the focus with an economic and scientific accountability for that program.

We are currently developing other technologies which will, we feel like, accelerate the development of this program. We have high intensive growth programs that are being developed. There are models now in various of our units. Along with that is the preparation of manuals to operate these programs. Training we have been providing to the industry at demonstration sites. And then we are actually on the farm assistance, we do some of that.

Another thing that continues to develop and really jump start this industry ahead of that around the world is our high health and genetically improved stocks. Throughout the world, aquaculture of marine shrimp is an extremely important industry but the production is beginning to decline because like any other production system, chickens, hogs, salmon, whatever other program that you want to look at, cattle, it is based on controlling diseases because you have them crowded in these areas. So genetically we have been able to improve the stocks, we have developed high health groups. We have identified these and have them in isolation and are supplying these stocks to our industry and we will continue in that direction.

We are also compiling industry and devising approaches and procedures for models for shrimp farm financial management. We are developing guidelines and strategies for dealing with the government permitting process in aquaculture which is a rather formidable thing that one has to deal with. We are also developing products for harvesting, processing and marketing and distributing these shrimp about the country.

I think one of the successes of this whole program has been the close cooperation amongst all of the institutions. There is no me first attitude amongst the group. We look at the problems, we meet with our industry advisory panel each year. We identify for them what we have done, where we propose to go. We get their input and it has been modified each year with the input from the industry so it is an industry-driven and directed program.

In fiscal year 1994, the consortium is poised to capitalize on its advanced products and technologies. The U.S. can reduce its trade deficit and still provide the consumer with its preferred marine product which is marine shrimp. The realization of these goals for fiscal year 1994 will require expansion of operational support from the 3.5 up to $5 million and a one-time capital grant of $4 million.

Our technology is actually outstripping out ability to deal with it so we actually need some infusion of one-time dollars to enhance the facilities that are being used at our member institutions.

And, again, we always thank the committee for allowing us to be here and your continued support and I will be happy to answer any questions.

Mr. DURBIN. Dr. McIlwain, what percentage of the shrimp consumed in America are imported?

Mr. MCILWAIN. Around 82 percent.

Mr. DURBIN. So despite the size of the industry, you have told us we are still heavily dependent on imported shrimp.

Mr. MCILWAIN. Absolutely.

Mr. DURBIN. Do you see the day coming when we will be able to not be self-sufficient but, let us say, provide half the shrimp consumed in this country?

Mr. MCILWAIN. I am never sure we will be able to provide half of them but we are looking at basically a billion pounds of shrimp that are consumed or maybe just underneath that. I think we can have a substantial impact on the industry.

What is interesting is in some of the marketing studies that have been done like in Texas and South Carolina, we have found that the aquaculture U.S. raised shrimp actually demand a better price. You can get almost a dollar a pound more. One company had a marketing program with Kroger stores and advertised this Texas-raised pond shrimp and what have you, and it is a good product and we know it is clean because it is packed under inspection here where what you are getting coming from outside you do not really know about. So it is a quality product.

Mr. DURBIN. Well, your effort, the consortium has certainly come to our attention before. You have done some fine work and we are going to do our best to help you out.

Mr. MCILWAIN. Thank you very much.

Mr. DURBIN. Mr. Myers?

Mr. MYERS. What does Tufts contribute to the consortium?

Mr. MCILWAIN. Tufts is primarily involved in the disease portion of it. They have been working on the development of a monoclonal antibody to identify a virus that has been a real problem in the shrimp culture industry.

Mr. MYERS. How long does it take a shrimp to get ready to go to market?

Mr. McIlwain. Right now, we are doing them in about nine months, eight to nine months. That can be shortened. We are looking at some technologies that are called head starting that would allow us in this country to produce two crops a year.

One of the things my laboratory specifically is involved in this whole thing is dealing with maturation of the shrimp. In other words, to be able to culture something, you have got to be able to control the life history, you have got to be able to produce the seed when you need the seed to be stocked. We are succeeding in doing that in a closed culture system where we can control all the variables.

By doing this, we are able to spawn the shrimp earlier than they would normally do that. We can put them in hatchery situations and hold them and get them up to a size that after the first frost in the spring you stock them out and harvest them by about July then and you are looking at about four months production in culture facility, stock another group that you have spawned off and reared in a hatchery system up in July and harvest them before the first frost in the fall.

Mr. Myers. So you could produce them in the northern areas, then, up where the chairman and I live.

Mr. McIlwain. Right. And even move further north with them. That is right.

Mr. Myers. These are freshwater?

Mr. McIlwain. No, these are marine shrimp.

Mr. Myers. Are you not developing a freshwater shrimp now?

Mr. McIlwain. Mississippi State University has been working on a freshwater shrimp for some period of time. But we have concerned ourselves only with the marine aspects of it so that we are not duplicating any effort in that process.

Mr. Myers. Thank you.

Mr. Durbin. Thank you very much for joining us.

Mr. McIlwain. Thank you very much.

[The prepared statement follows:]

TESTIMONY

TO

THE HOUSE AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES SUBCOMMITTEE ON APPROPRIATIONS

THE HONORABLE RICHARD J. DURBAN, CHAIRMAN

FOR

U.S. MARINE SHRIMP FARMING PROGRAM

GULF COAST RESEARCH LABORATORY CONSORTIUM

BY

DR. THOMAS D. McILWAIN, DIRECTOR

GULF COAST RESEARCH LABORATORY

OCEAN SPRINGS, MISSISSIPPI

April 20, 1993

THIS TESTIMONY IS OFFERED IN SUPPORT OF CONTINUED FUNDING FOR THE GULF COAST RESEARCH LABORATORY CONSORTIUM'S U.S. MARINE SHRIMP FARMING PROGRAM. IT IS SUBMITTED ON BEHALF OF THE MEMBERS OF THE CONSORTIUM: THE GULF COAST RESEARCH LABORATORY, MISSISSIPPI; THE OCEANIC INSTITUTE, HAWAII; TUFTS UNIVERSITY, MASSACHUSETTS; TEXAS A&M UNIVERSITY SYSTEM, TEXAS; THE WADDELL MARICULTURE RESEARCH AND DEVELOPMENT CENTER, SOUTH CAROLINA; AND THE UNIVERSITY OF ARIZONA, ARIZONA.

BACKGROUND

IN 1985 THE OCEANIC INSTITUTE, TUFTS UNIVERSITY, AND THE GULF COAST RESEARCH LABORATORY SUGGESTED A UNIQUE APPROACH FOR THE U.S. INDUSTRY AND ECONOMY TO BENEFIT FROM OUR CONSUMERS DEMAND FOR SHRIMP PRODUCTS. FOREIGN SHRIMP PRODUCING COUNTRIES WERE THE PRINCIPAL BENEFICIARIES, RESULTING IN A TRADE DEFICIT OF $2 BILLION.

THE APPROACH WAS DECEPTIVELY SIMPLE AND STRAIGHTFORWARD: IDENTIFY TECHNOLOGIES AND PRODUCTS THAT WOULD PROVIDE THE U.S. WITH A COMPETITIVE ADVANTAGE, ENLIST THE PARTICIPATION OF TOP RESEARCH AND INSTITUTIONS, DIRECT A NARROWLY FOCUSED AND RESULTS-ORIENTED PROGRAM DEDICATED TO INDUSTRY PROFITABILITY AND EXPANSION AND PROVIDE SUFFICIENT FUNDS FOR THE HIGHEST QUALITY RESEARCH, DEVELOPMENT, AND TECHNOLOGY TRANSFER TO PROVIDE OPPORTUNITIES FOR COMPETITIVE ADVANTAGE. IN FULFILLING OUR PLEDGE TO ENLIST THE BEST, PROGRAM MEMBERSHIP WAS OFFERED AND ACCEPTED BY THE TEXAS A&M UNIVERSITY SYSTEM, THE WADDELL MARICULTURE RESEARCH AND DEVELOPMENT CENTER IN SOUTH CAROLINA, AND THE UNIVERSITY OF ARIZONA. WE ALSO WORK IN CLOSE COOPERATION WITH 26 U.S. COMPANIES. THE APPROACH MAXIMIZES ACCOMPLISHMENT, TECHNICAL, AND FINANCIAL ACCOUNTABILITY AND MINIMIZES BUREAUCRATIC CONSTRAINTS.

1992: A BANNER YEAR

THE U.S. DOMESTIC MARINE SHRIMP FARMING INDUSTRY ENJOYED A BANNER YEAR IN 1992: BOTH PRODUCTION AND PROFIT LEVELS ESTABLISHED RECORD HIGHS. ALL SHRIMP FARMING REGIONS OF THE COUNTRY PROSPERED WITH INCREASES IN PRODUCTION OVER 1991 OF 110 PERCENT IN TEXAS, 52 PERCENT IN HAWAII, AND 48 PERCENT IN SOUTH CAROLINA. THE TOTAL PRODUCTION OF FARMED SHRIMP IN THE U.S. INCREASED FROM 2.6 MILLION POUNDS IN 1991 TO 4.8 MILLION POUNDS IN 1992, AN INCREASE OF OVER 83 PERCENT NATIONWIDE. THE ANNUAL INCREASE IN REVENUE EXCEEDED $7 MILLION.

THE INCREASES IN PRODUCTION AND PROFITABILITY RESULTED DIRECTLY FROM PRODUCTS AND TECHNOLOGIES DEVELOPED AND TRANSFERRED TO FARMERS BY MEMBER INSTITUTIONS OF THE GULF COAST RESEARCH LABORATORY CONSORTIUM THROUGH ITS U.S. MARINE SHRIMP FARMING PROGRAM. PRINCIPAL FUNDING FOR THE CONSORTIUM HAS BEEN PROVIDED THROUGH YEARLY CONGRESSIONAL INITIATIVES, INCLUDING $3.5 MILLION FOR FY 1993. NOT ONLY HAVE EXISTING MARINE SHRIMP

FARMING COMPANIES PROSPERED AND EXPANDED, BUT AT LEAST TWO NEW DOMESTIC COMPANIES HAVE FORMED TO COMMERCIALIZE AND EXPLOIT HIGH- HEALTH SHRIMP STOCKS FOR DOMESTIC AND FOREIGN MARKETS. IN ADDITION, ONE EXISTING HIGH TECH COMPANY HAS UNDERTAKEN THE COMMERCIALIZATION OF AN ADVANCED DISEASE SCREENING PROCESS.

HIGH TECHNOLOGY ADVANCES, RESULTING FROM NARROWLY FOCUSED, DIRECTED, AND RESULTS-ORIENTED APPLIED RESEARCH AND DEVELOPMENT PROJECTS, ARE TARGETED TO FURTHER ENHANCE THE U.S. ECONOMY THROUGH INCREASED COMPETITIVE ADVANTAGE IN THE MARKET PLACE. IN PARTICULAR, THE CONSORTIUM DEVELOPMENT OF HIGH HEALTH/GENETICALLY IMPROVED SHRIMP STOCKS AND DISEASE CONTROL METHODS, PRODUCTS AND SERVICES IS CREDITED WITH THE RAPID EXPANSION OF DOMESTIC MARINE SHRIMP FARMING. MORE IMPORTANTLY, THESE HIGH TECHNOLOGY ADVANCES, IF CONTINUED AND FULLY DEVELOPED, COULD PLACE THE U.S. IN A GLOBAL LEADERSHIP ROLE.

WORLDWIDE, MARINE SHRIMP FARMING IS A $4 BILLION DOLLAR INDUSTRY. THE PROFITABILITY AND SUSTAINABILITY OF THIS WORLDWIDE INDUSTRY IS INCREASINGLY CHALLENGED BY DEVASTATING DISEASE PROBLEMS AND ACUTE SHORTAGES OF QUALITY SEED. BASED UPON COMPARISONS WITH OTHER ANIMAL PRODUCTION MODELS (CHICKENS, PIGS, SALMON, ETC.), SHRIMP FARMING WORLDWIDE WILL INEVITABLY BECOME DEPENDENT UPON HIGH-HEALTH AND GENETICALLY-IMPROVED SHRIMP STOCKS, AS WELL AS SOPHISTICATED DISEASE CONTROL METHODS, PRODUCTS AND SERVICES CURRENTLY UNDER DEVELOPMENT BY THE CONSORTIUM.

THE TECHNOLOGY NEEDED TO PRODUCE GENETICALLY IMPROVED SPECIFIC PATHOGEN FREE (SPF) SHRIMP STOCKS IS HIGHLY SOPHISTICATED AND NOT EASILY TRANSFERRED, COPIED, OR ADOPTED. THE TECHNOLOGY WILL REQUIRE CONTINUOUS IMPROVEMENT AND REFINEMENT. SHRIMP PRODUCERS UTILIZING THIS IMPROVED SEED WILL CONTINUE TO BE DEPENDENT UPON THOSE CONTROLLING THE TECHNOLOGY, CREATING A SUSTAINABLE DEMAND. THE U.S. IS POSITIONED TO ASSUME A WORLD LEADERSHIP ROLE IN SEED STOCK FOR SHRIMP FARMING, AS IT HAS FOR OTHER PLANTS AND ANIMALS.

THE U.S. MARINE SHRIMP FARMING PROGRAM OF THE GULF COAST RESEARCH LABORATORY CONSORTIUM IS RECEIVING UNQUALIFIED SUPPORT AND ENCOURAGEMENT BY CSRS/USDA IN THEIR ADMINISTRATION OF THE FUNDS PROVIDED BY CONGRESSIONAL APPROPRIATIONS. CSRS/USDA HAS SUGGESTED THAT THIS IS A MODEL PROGRAM FOR RESOLVING IMPORTANT PROBLEMS AND CAPTURING OPPORTUNITIES IN BOTH AGRICULTURE AND AQUACULTURE.

FUTURE PROJECTIONS

WITH CONTINUING ATTENTION TO HIGH TECHNOLOGY APPLIED RESEARCH AND DEVELOPMENT, THE U.S. DOMESTIC MARINE SHRIMP FARMING INDUSTRY COULD REACH $500 MILLION IN 10 YEARS. THIS PROJECTION IS BASED UPON A 12-FOLD INCREASE IN DOMESTIC SHRIMP PRODUCTION TO 60 MILLION POUNDS, VALUED AT $250

MILLION. THE REMAINING $250 MILLION WILL RESULT FROM THE PRODUCTION AND EXPORT OF HIGH-HEALTH AND GENETICALLY-IMPROVED STOCKS, DISEASE CONTROL PRODUCTS AND SERVICES, MACHINERY, EQUIPMENT, AND INSTRUMENTS DESPERATELY NEEDED BY A $4 BILLION DOLLAR WORLD SHRIMP FARMING INDUSTRY.

U.S. CONSUMER PREFERENCE

RECENT CONSUMER PREFERENCE SURVEYS AND IMPORT DEFICIT DATA PROVIDE UNEQUIVOCAL JUSTIFICATION FOR ENCOURAGING AND SUPPORTING EXPANSION OF THE DOMESTIC FARMING OF MARINE SHRIMP. SHRIMP DOMINATES CONSUMER PREFERENCES IN ALL REGIONS OF THE UNITED STATES. SHRIMP IS FOLLOWED BY: LOBSTER IN THE NORTHEAST, GREAT LAKES REGIONS AND MOUNTAIN REGIONS; FLOUNDER IN THE MID-ATLANTIC AND SOUTHEAST COAST; CATFISH IN THE DEEP SOUTH, MIDWEST AND TEXAS; AND SALMON IN THE WEST AND NORTHWEST REGIONS. SEVENTY PERCENT OF THE SHRIMP CONSUMED IS IMPORTED AT A $2 BILLION DOLLAR ANNUAL DEFICIT. THE CONGRESSIONAL INITIATIVE HAS PROVIDED THE MEANS TO REACH A CRITICAL MASS OF THE MOST QUALIFIED SCIENTIFIC INVESTIGATORS AND THEIR INSTITUTIONS. THE CONSORTIUM HAS MADE SUBSTANTIAL PROGRESS TOWARD STABLE AND PROFITABLE MARINE SHRIMP FARMING IN THE UNITED STATES.

RIGOROUS PROGRAM REVIEW

RECENTLY, CSRS/USDA FORMED AN INDEPENDENT PANEL TO RIGOROUSLY REVIEW THE U.S. MARINE SHRIMP FARMING PROGRAM. THE PANEL FOUND THE CONSORTIUM PROGRAM TO BE WELL MANAGED, PROVIDING DIRECTION, ENCOURAGEMENT, AND RESOURCES TO PRINCIPAL INVESTIGATORS THAT, WITHOUT EXCEPTION, ARE HIGHLY COMPETENT RESPECTED SCIENTISTS. THESE SCIENTISTS, LEADERS IN THEIR FIELD IN SHRIMP RESEARCH, WERE FOUND TO BE MAKING SUBSTANTIAL PROGRESS TOWARD THE GOAL OF INDUSTRY EXPANSION.

A MODEL PROGRAM

IT HAS BEEN SUGGESTED THAT THIS PROGRAM IS A MODEL FOR RESOLVING IMPORTANT PROBLEMS IN AGRICULTURE AND AQUACULTURE. THE APPROACH IS STRAIGHT FORWARD: ESTABLISH THE GOAL, DEFINE THE PROBLEM, DEVELOP AN APPROACH, IDENTIFY AND ENLIST THE MOST QUALIFIED SCIENTISTS AND ENGINEERS, PROVIDE ADEQUATE RESOURCES, AND MANAGE TO ENSURE FOCUS WITH ECONOMIC AND SCIENTIFIC ACCOUNTABILITY.

OTHER TECHNOLOGIES UNDER DEVELOPMENT

THE CONSORTIUM IS DEVELOPING AND TRANSFERRING TO U.S. INDUSTRY HIGH INTENSITY AND HIGH GROWTH RATE CULTURE TECHNOLOGY FOR PROFITABLE SHRIMP FARMING, INCLUDING THE PREPARATION OF MANUALS, TRAINING AT DEMONSTRATION SITES, AND ON-FARM ASSISTANCE.

EXPANSION OF THIS EFFORT, WHICH IN PART IS DEPENDENT UPON THE HIGH HEALTH

AND GENETICALLY IMPROVED STOCKS DESCRIBED ABOVE, WILL PROVIDE THE U.S. FARMER WITH LOW COST PRODUCTION METHODS ESSENTIAL TO SUCCESSFUL COMPETITION WITH FOREIGN SUPPLIERS.

THE CONSORTIUM IS COMPILING INFORMATION AND DEVISING APPROACHES, PROCEDURES AND MODELS FOR SHRIMP FARM FINANCIAL MANAGEMENT, AND DEVELOPING GUIDELINES AND STRATEGIES FOR SATISFYING GOVERNMENT PERMITTING REGULATIONS. THE CONSORTIUM IS ALSO DEVELOPING PRODUCT HARVESTING, PROCESSING, MARKETING, AND DISTRIBUTION SYSTEMS TO SUPPLY VARIOUS PRODUCT FORMS TO NATIONAL AND FOREIGN CUSTOMERS.

CLOSE COOPERATION BETWEEN MEMBER INSTITUTIONS

IT IS IMPORTANT TO NOTE THAT OUR RAPID RATE OF PROGRESS IS DUE TO THE QUALITY OF THE PRINCIPAL INVESTIGATORS, THE LEVEL OF FUNDING AND MAINTENANCE OF A VERY NARROW FOCUS. IT IS INCREASINGLY OBVIOUS THAT A MAJOR CONTRIBUTOR TO PROGRESS IS CLOSE COOPERATION AND INTEGRATED EFFORTS BY INVESTIGATORS AND TECHNICIANS FROM SEVERAL INSTITUTIONS ON SPECIFIC PROBLEMS. FOR EXAMPLE:

1. THE ESTABLISHMENT OF NUCLEAR BREEDING FACILITIES IN HAWAII IS THE PRINCIPAL RESPONSIBILITY OF HAWAII; BUT, KEY CONTRIBUTIONS ARE BEING MADE BY ARIZONA, MISSISSIPPI, AND OTHER GOVERNMENT AND COMMERCIAL INTERESTS.

2. ESTABLISHMENT OF MATURATION/REPRODUCTION SYSTEM TECHNOLOGY, EFFECTIVE IN EVERY REGION OF THE UNITED STATES, RESULTED FORM THE COMBINED EFFORTS OF HAWAII, SOUTH CAROLINA, MISSISSIPPI, AND TEXAS.

3. THE ACQUISITION, QUARANTINE, AND SCREENING OF WILD STOCKS, AN ESSENTIAL STEP TOWARD DOMESTICATION, IS A COMBINED EFFORT OF ARIZONA, HAWAII, MISSISSIPPI, AND TEXAS.

4. THE DEVELOPMENT OF ADVANCED SEROLOGICAL AND MOLECULAR DIAGNOSTIC PRODUCTS AND PROCEDURES, INCLUDING MONOCLONAL ANTIBODIES AND GENE PROBES, IS THE PRIMARY RESPONSIBILITY OF ARIZONA. FIELD EVALUATIONS CURRENTLY INVOLVE HAWAII, MISSISSIPPI, AND FLORIDA.

5. MASSACHUSETTS IS LEADING EFFORTS TO QUANTIFY GENETIC DIVERSITY AND IDENTIFY GENETIC MARKERS THAT WILL ACCELERATE THE DOMESTICATION PROCESS. THESE EFFORTS INTERACT WITH HAWAII, MISSISSIPPI, AND ARIZONA.

INDUSTRY DEVELOPMENT FOCUS

TO ENSURE OUR FOCUS REMAINS ON INDUSTRY EXPANSION, THE CONSORTIUM WORKS INTERACTIVELY WITH EXISTING MARINE SHRIMP FARMS, AS WELL AS AQUACULTURE SUPPORT COMPANIES IN THE UNITED STATES, INCLUDING SEVEN COMPANIES IN HAWAII, SEVEN COMPANIES IN TEXAS, NINE COMPANIES IN SOUTH CAROLINA, ONE IN FLORIDA, ONE IN IDAHO, AND ONE IN PENNSYLVANIA.

FY 1994

RAPID TECHNOLOGICAL PROGRESS IS OUTSTRIPPING OUR EXISTING INFRASTRUCTURE. RESOURCES ARE BEING SOUGHT TO ESTABLISH NUCLEAR BREEDING CENTERS IN HAWAII, BROODSTOCK PRODUCTION AND TESTING AND SEED PRODUCTION CENTERS IN TEXAS, HAWAII, AND SOUTH CAROLINA, AND DISEASE AND QUARANTINE CENTERS IN MISSISSIPPI AND ARIZONA.

THE CONSORTIUM IS POISED TO CAPITALIZE ON ITS ADVANCED PRODUCTS AND TECHNOLOGIES. THE UNITED STATES CAN REDUCE ITS TRADE DEFICIT AND STILL PROVIDE CONSUMERS WITH THEIR PREFERRED SEAFOOD - MARINE SHRIMP. REALIZATION OF THESE GOALS FOR FY 1994 WILL REQUIRE EXPANSION OF OPERATIONAL SUPPORT TO $5 MILLION AND A ONE-TIME CAPITAL GRANT OF $4 MILLION.

APPRECIATION

WE THANK THE COMMITTEE AGAIN FOR ITS CONTINUING SUPPORT, BEGINNING IN 1985, TOWARD THE DEVELOPMENT OF THIS HIGH TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM, WHICH IS BEGINNING TO DELIVER ITS INTENDED RETURN: AN INTERNATIONALLY COMPETITIVE, PROFITABLE, EXPANDING, AND DIVERSIFIED U.S. MARINE SHRIMP FARMING INDUSTRY.

P.L. 480, SEC. 416 AND FOOD FOR PROGRESS

WITNESS

JOHN A. DONNELLY, CATHOLIC RELIEF SERVICES

Mr. DURBIN. John Donnelly with the Coalition for Food Aid. Thank you for joining us. Your statement will be made part of the record.

Mr. DONNELLY. Thank you, Mr. Chairman. I appreciate that and with that knowledge, I will just highlight some of that statement for you and then be pleased to answer any questions that you may wish.

I am John Donnelly. I am the Senior Director with Catholic Relief Services with responsibility for overseeing all activities related to government-sponsored international food programs.

I am here today in a capacity of representing the Coalition for Food Aid which comprises the major U.S. private voluntary agencies and cooperatives implementing food aid programs around the world at the grassroots levels.

In addition to Catholic Relief Services, the membership includes such well recognized entities as CARE, Save the Children, Africare, World Vision and the Agricultural Cooperative Development International, to name but a few.

As food aid program sponsors, we engage recipients in a variety of programs that help to alleviate hunger and its causes, promoting economic and community development through sustainable growth. We acknowledge responsible stewardship of program resources and bring to the process significant additional funding and material resources.

Our programs are highly targeted and guard against the major negative impacts of food aid, disincentive and dependency. Collectively as private voluntary agencies and cooperatives we programmed over 1.5 million metric tons in fiscal year 1993.

We acknowledge and support the critical understanding that food is a basic human right and crucial concern, not only in developing countries but also in the rural communities and in the cities of the United States. It is an issue wherever people cannot produce or purchase sufficient food to meet their nutritional needs.

The continued commitment of the United States Government to respond to food deficit situations wherever gives witness to our understanding of such humanitarian concerns.

We are there pleased to see that the president's fiscal year 1994 budget would increase funding for domestic food assistance programs as well as for Public Law 480 Title 2. We believe the budget is appropriate to fund all envisioned programs. However, we feel somewhat compelled to acknowledge the specter of continuing emergencies and future disasters that may in time compromise even this generous budget.

Having been personally involved in food aid programs for close to 30 years, I am increasingly dismayed at the growing number of protracted emergencies: Bosnia, Somalia and Cambodia. On the horizon, we find Sudan, Rwanda and Mozambique. I am deeply concerned of budget constraints and the potential tradeoffs between

the multi-year sustainable growth programs implemented by private voluntary agencies and cooperatives and these emergencies.

The donor community at large must come to grips with this compelling resource issue so as to affect a concerted effort on behalf of both long term development needs and emergencies or disasters.

PVOs and cooperatives and U.S. Government officials work hard on the development of disaster plans. It is an acknowledged fact, however, that the presence of the development program is the most effective mitigator of the impact of dysfunctional governments, poor infrastructure and general chaos when disaster strikes.

In the same vein, food aid assistance to the emerging democracies should also be considered in addition to that program for third world development and/or emergency responses.

In the interests of time, I would refer the committee to my written testimony for more detailed comments on the emergency democracies.

The need for continued food aid assistance is perhaps greater today than it has been in the past largely perhaps because of the end of the cold war and the destabilization of governments. The Food and Agricultural Organization indicates food deficits in 1993 and 1994 may reach 2.6 million tons.

In conclusion, Mr. Chairman, the entire membership of the food aid coalition looks forward to working with you and the administration on these critical issues and finding solutions.

Thank you.

Mr. DURBIN. When you make reference here to the projected cuts in Public Law 480, are you referring to the budget resolution?

Mr. WHITE. These are the—I am sorry.

Mr. DURBIN. Well, it is page four in your first paragraph.

Mr. WHITE. These are proposed cuts in Title I and Title III from the administration.

Mr. DURBIN. Oh, I see. So the President increased Title II, but made cuts.

Mr. WHITE. Increased Title II, which we applaud.

Mr. DURBIN. What are you suggesting? Let me make it clear. In your previous sentence about the use of CCC surplus as alternative, and this is during emergencies.

Mr. WHITE. I am sorry, could you repeat the question, please?

Mr. DURBIN. It is page four again, the same paragraph. And you say at one point there, "When an acute food shortage occurs, non-emergency Title II programs must not be looked upon as a source. There are other options for policy makers, such as using CCC surplus commodities or the Title III program."

Can you explain that a little bit?

Mr. WHITE. Sec. 416 is a source of commodities that are available traditionally to meet emergency programs. There is also a portion within the Title II budget that is also allocated to emergencies.

Mr. DURBIN. Title II?

Mr. WHITE. The Title II budget. What we speak to here are ongoing programs that are sustainable growth oriented that have commitments over a multi-year period that require the commitment of local people on the ground, their time and their energy, and also their money. These commitments are well thought out, as we mentioned in the testimony. And they are targeted. To disrupt them by

taking funds and/or commodities away from them to meet the emergencies is to in fact place those development programs at the same risk level as the emergencies.

Mr. DURBIN. For the record, give us the distinctions on the three titles, how each of them works. I know that one is——

Mr. WHITE. On the food side, Title I is a government to government program. Title II is a grant program, largely implemented through private voluntary agencies and PVOs. Title III is also a grant program, where it is concessional sales to local governments, proceeds from the repayment of which flow to private voluntary agencies and/or cooperatives in the field.

Mr. DURBIN. The commodities that are covered by Public Law 480, do they include vegetable oils?

Mr. WHITE. Yes, they do.

Mr. DURBIN. There is a demand for those?

Mr. WHITE. There is indeed. Vegetable oil is a highly nutritional commodity, and sought after in almost all of our programs. The balance is the commodity basket, if you will.

Mr. DURBIN. Is there anything not included that is eligible in Public Law 480 that you think should be?

Mr. WHITE. I think that we are always on the search of the look out for additional commodities that would be more relevant to the local communities, especially as to not to be bringing commodities which compete for local markets. But I would say at this point that the commodities that are available, blended foods and soybean oil are probably sufficient and adequate for our needs at this time.

Mr. DURBIN. I will tell you one quick story. I made a trip to Calcutta, India, and went to a little village. And I had to get out of the four wheel drive vehicle and walk back to the feeding area there. And I found a bag of this blended food, which they were making into some—I cannot tell you what it was, but it was something that the kids were anxious to get. And darn, if it did not come from Peoria, Illinois. I know that we were reaching out, and the people were genuinely appreciative.

Mr. WHITE. It may well have been CSN or a wheat and soy blend. The blended foods are highly nutritious. And little children, even at risk, I saw children in Somalia who were able to tolerate that as as commodity.

Mr. DURBIN. It does not look all that appetizing, but the kids were eating like it like it was doughnuts.

Mr. MYERS. Several years ago, I served it in the dining room over here.

Mr. DURBIN. Go ahead, Mr. Myers.

Mr. MYERS. The CRS, you do a tremendous job. A number of years ago, I will tell a story too, the New York Times was criticizing the Indonesian government on the treatment in East Timor. I flew out there, and took a look at it. And the Catholic Relief Service was right there feeding these people. And as we flew in the helicopter, I sat in the front seat. And the Times reporter out there said well, they will take you where they want you to go. Because there was still a war going on there, a civil war going on.

I am a pilot myself. So I put on the map I will go here. So I made sure that where I went contradicted what that New York Times reporter said. But nevertheless, those people were being fed very

well. I felt like a mother hen, a bird coming in. When the bird started to come in, all of those people came around with their cups and their cans to get their food.

But the CRS was doing a tremendous job there. You do do a great job. I complimented you all over the country for that.

Mr. WHITE. I thank you for those remarks, especially so in East Timor. I was out there on several occasions myself. And that was a program that literally saved hundreds of thousands of lives.

Mr. DURBIN. I might say that my experience was similar. Because I asked the people on the ground which ones of these well known charities were actually delivering, good people doing good services. Every one that you mentioned came off, virtually all of them did. There is always a suspicion, or perhaps that is not the case. But I can tell you that the ones that you represent, they certainly do have a good reputation.

Thank you for joining us today.

Mr. WHITE. Thank you.

[The prepared statement follows:]

CRS

CATHOLIC RELIEF SERVICES

TESTIMONY OF JOHN A. DONNELLY BEFORE THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FDA, AND RELATED AGENCIES

Mr. Chairman, I would like to thank you and your distinguished collegues on this panel for allowing me to appear today on behalf of Catholic Relief Services (CRS) and the membership of the Coalition for Food Aid. I am currently the Senior Director of the CRS Office of Project Resource Management, which oversees all agency activities related to government-sponsored food programs. Now celebrating its 50th anniversary, CRS is one of the largest private overseas relief agency in the United States with a total budget of approximately $285 million.

The Coalition For Food Aid consists of a number of private voluntary organizations (PVOs), including CARE, Africare, Save the Children and many similar groups. It also includes cooperative organizations such as Agricultural Cooperative Development International. All of these groups conduct overseas food aid programs.

As food aid program sponsors, private voluntary organizations and cooperatives engage recipients in a variety of programs that help to alleviate hunger and its causes, and to promote economic and community development the implementation of such programs requires a great deal of planning --- conducting needs assessments; identifying target populations; establishing management, distribution and monitoring systems; hiring and training personnel;

and maintaining oversight and accountability as required by laws and regulations governing all food assistance that leaves U.S. ports.

Mr. Chairman, our organizations are in the front lines, conducting food aid programs that reach people and communities in over 50 countries, pursuant to the P.L. 480 Title II, Section 416, and Food For Progress authorities. In F.Y. 1993, PVO and cooperative programs will implement food aid programs utilizing approximately 1.5 million metric tons of food.

Food is a crucial concern not only in developing countries, but also in the rural communities and inner cities of the United States. It is an issue wherever people cannot produce or purchase enough food to meet their basic nutritional needs. Nearly one billion people in the world lack access to sufficient food because of poverty, insufficient production or restricted access to supplies. The UN estimates that 40,000 children die every day from hunger and disease. While food aid is a critical element, it is only a part of the answer to the vast and complex problems associated with hunger. Nevertheless, the world looks to the United States for leadership in food assistance programs. The United States has met this challenge consistently since the enactment of the P.L. 480 Program in 1954.

The continued commitment of the U.S. Government to respond to food deficit situations around the world is witness to our humanitarian concerns. There is, in addition, a mutual benefit to our domestic needs: money is spent in the United States to procure

agricultural commodities for the transportation of such commodities via rail and truck to U.S. ports and to U.S. steamship lines for the carriage of the commodities to the poor in the developing world. These monies support domestic economic programs and are a significant contribution to the daily U.S. work force.

We are therefore pleased to see that the President's Fiscal Year 1994 budget would increase funding for domestic food assistance programs, as well as for P.L. 480 Title II. We applaud and support this commitment to food deficit issues both domestically and internationally. The budget is appropriate for present envisioned programs, however we feel compelled to point out that ongoing refugee and famine crises in Somalia, Sudan, Mozambique and the former Yugoslavia may well render this budget insufficient. We issue this only as a caution and for your consideration in formulating the final budget.

Nearly 75% (or 1.525 mmt) of the P.L. 480 Title II Program targets vulnerable groups such as children, mothers, impoverished communities that lack the ability to produce or buy sufficient food. Such programs are designed by PVOs and cooperatives on a multi-year basis to ensure a continuity in the flow of resources to communities and governments committed to addressing not only food aid deficit issues, but poverty in general. Within the design of these programs, Title II is used not only in free distribution projects but also in support of other activities such as health care, education, training programs, building infrastructures, the environment and to finance small businesses and cooperative

enterprises.

For this reason, when an acute food shortage occurs, the non-emergency Title II Programs must not be looked upon as a source of budgetary support toward an emergency response. There are other options for policymakers during emergencies, such as the use of CCC surplus commodities under Section 416 (b) of the Agriculture Act of 1949, or the Title III Program. It is again why we would respectfully request the Congress to reconsider the proposed cuts in the President's budget for P.L. 480 Title I and Title III.

In recent years civil strife and unstable governments have exacerbated the effects of droughts and other natural disasters. Having been personally involved in food aid programs for close to 30 years, I am greatly dismayed at the protracted emergencies such as in Bosnia, Somalia and Cambodia. The donor community, at large, must come to grips with the resource needs and duration of interventions so as to deal effectively with the disaster while maintaining ongoing multi-year development programs. We must focus ever more closely on the links of opportunity for disaster relief to rehabilitation and long term development. Developing countries, PVOs and cooperatives, as well as branches of the U.S. Government, are committed to the development of disaster preparedness plans. This effort notwithstanding, it is a proven fact that a disaster preparedness plan is best facilitated by the presence of an on-going development program. This investment in long term development mitigates the impact of dysfunctional governments, poor infrastructure and food deficit at the time of an emergency.

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We would like to take this opportunity to also express our views on food aid programs and the Emerging Democracies. The President has announced that an additional $700 million in food aid will be provided to Russia. We are glad to hear that this new program will focus on areas outside Moscow, and on programs sponsored by non-governmental entities, and on programs that actually reach those in need. We believe this will provide for better management of resources, improved targeting of programs and a better awareness among the Russian people of American commitment and support.

The Food For Progress Program, which was drafted specifically with emerging market economies and democracies in mind, and Section 416 are appropriate mechanisms for providing assistance to the newly independent states of the former Soviet Union (NIS). Most important, food for the NIS should be in addition to P.L. 480 food aid programs that target less developed nations and most vulnerable populations.

If an additional $700 million in food aid is going to be provided for Russia under the Food For Peace Program it seems that some funding issues may have to be addressed. There are three sources of funds for commodities for the Food For Progress Program: (1) Title I funds, (2) Section 416 commodities, (3) CCC funds. There is a $30 million cap on the CCC funds that can be made available to transport the Section 416 commodities used for Food For Progress. There is also a $10 million cap on the funds available to help administer these programs. The budget issues for

the NIS must be recognized and addressed accordingly independent of the Title II budget.

The imposed caps on transportation and administration has led USDA in 1993 to reduce or delay the approval of PVO and cooperative programs. A provision in the Freedom Support Act of 1992 was written to help address this problem. To assist PVOs and cooperatives in carrying out Section 416 and Food For Progress Programs in the NIS, Section 703 encourages the President to use (1) the $100 million in Defense Department funds made available under a Nunn/Lugar amendment to the 1992 Dire Emergency Supplemental Appropriations Act, and (2) funds made available under the Foreign Assistance Act of 1961. The community I today represent would strongly urge that these authorizations be utilized in support not only for the 1994 programs but also those still pending for 1993.

Mr. Chairman, Catholic Relief Services and the entire membership of the Food Aid Coalition look forward to working with you and the Administration on these critical issues. In this, the 50th Anniversary of Catholic Relief Services, we remain committed to food aid as an invaluable resource to those vulnerable and disenfranchised in the Third World. The need for continued food aid assistance is perhaps greater today than it has been in the recent past due to the destablization of world governments as a consequence of the end of the Cold War. The recent report on food crops and shortages issued by the Food and Agriculture Organization of the United Nations indicates that the food deficit situation may

actually increase by 2.6 million tons during 1993 and 1994. Against this backdrop I would again reiterate our commitment to work with you and the Administration toward finding the necessary solutions.

Thank you.

CONSERVATION PROGRAMS

WITNESS

KENNETH A. COOK, VICE PRESIDENT FOR POLICY, CENTER FOR RESOURCE ECONOMICS

Mr. DURBIN. I appreciate it very much.

Our last witness is Kenneth Cook, with the Center for Resource Economics. Thank you for patiently waiting. It is good to see you again.

Mr. COOK. Thank you, Mr. Chairman.

Mr. DURBIN. Your extensive statement, and anything else you brought will be put in the record within reason.

Mr. COOK. Thank you very much. I will summarize my testimony, and I hope that you do not need a microscope to read it. We did try to pack a lot in it.

I want to talk bout three basic subjects today, Mr. Chairman. And I appreciate the chance to visit with you about each of them. The first topic is the issue of implementation of the sod buster and swamp buster conservation and compliance provisions of the 1985 and 1990 farm bills. Second is the question of the weapon reserve program request in the president's budget and its cost effectiveness. And then finally just a few brief points about what I am terming the infrastructure for future green payments that I think that we need to begin constructing now, so that when the time comes that we will be in a better position to move in that direction with agricultural assistance.

On the resource compliance implementation issues, the report that we provided for the committee, which we published in March, basically presented the results of the analysis of hundreds of thousands of USDA computer records from both the Soil Conservation Service and ASCS. We compiled our own data bases of these records, and are grateful for the assistance that the Department gave us in providing the information.

We have a number of concerns that arise in this analysis that we mentioned in the testimony. First of all, we continue to be concerned about SES spot checks, that they are not reporting very many farmers out of compliance relative to the number of farmers that are found out of compliance when for example the Inspector General does a review.

We summarize on page two on the table there the results nationally, and then also for your district. We would have summarized them for the entire committee and are happy to do that. But basically, what you can see there is that in 1992 SES did status reviews or spot checks of over 97,000 tracts nationwide, and about 12,000 or so in the 20th. The number not actively applying about 2400 or almost 2500 nationwide, 2.5 percent of the ones that they checked. And in your district, 45 not actively applying. Those are for the highly erodable land provisions only. And that is about a 3.7 percent rate. So in your district, it is a little above the national average.

And you can see also, we just give the number for 1991. It is a pretty significant increase both nationally and in your district. The

raw numbers quadrupled in your district for the number of not actively applied determinations.

However, if you look at what the Office of Inspector General finds when they look at the county level, they find a very significantly higher not actively applying rate. There are some differences in the way that they make their determinations. Compared to SCS, for example, the Soil Conservation Service, if they go out and do a status review in May, in your part of the country if they find a producer who is not quite in compliance, they will give them until the end of the year, if there is something that can be done between May and the end of the year to come into compliance, and OIG did not allow that.

So that might account for some of the discrepancy. But the Inspector General basically was finding a ten percent noncompliance rate in 1991. And that was a very conservative estimate, if you read their report. They felt that there were a lot of plans that they could not really even evaluate. They also found that in many cases the status reviews were not conducted on time, which meant that taxpayers really were not sure whether or not conservation program rules were being violated.

And there was about $150 million on the line in those decisions, which really basically went unmade by the agency, because it did not get out in time to check and see if farmers were complying or not.

In Table 2, we look at the ASCS side of the issue. We present information there by county on page 3 for your district, and we also present the national picture. This is the particular set of numbers that has generated quite a bit of interest in the media. This is the first time that this analysis was done with ASCS data.

Basically since 1986, the very bottom line there, about 2500, 2499 farms, as ACSC defines farms, were found with violations of sod buster, swamp buster, or conservation compliance. $23 million or a little bit more than that was initially denied. About $10.4 million was reinstated, meaning about 44 percent or 45 percent of the benefits initially denied for those violations were reinstated.

In your district, we found when we analyzed the data 49 farms with violations to date, and a little bit less than a half a million denied initially on those farms. And $264,000 was reinstated, or about almost 58 percent of the benefits reinstated.

As we say in the report and I will say there, we are not saying that this is direct evidence of improper determinations or improper actions on the part of ASCS. But we have some concern that there is a very substantial percentage of the benefits that are reinstated. And we have urged the Inspector General to at least look at those situations were all of the benefits are reinstated that have been denied.

Nationwide, when we looked, we found that there were 764 counties where a farm had been denied at least some benefits. And in half of those counties, all of the benefits had been reinstated. When we looked just quickly at your district, the counties there, we found six counties with no violations to date, and six counties with over 80 percent of the benefits denied being reinstated.

Again, short of going down to the case load level or down to the actual cases, we do not know the story behind these. But we do feel

that it is a concern that is consistent with the Inspector General's other study or related study of benefits.

ASCS reported that $10.4 million in benefits were denied nationwide since 1986. The Inspector General went to just ten states for one year, and just the highly erodable land provisions. And they estimated $20 million on that basis.

There is a discrepancy in there that concerns us. And that brings me to the first general implication I think for this fiscal year 1984 budget, which is that we really are sitting on a powder keg here. We do not have an ongoing solid evaluation of these policies that we need. Congress mandated one in the 1990 farm bill for seeing the need to know where we are before the 1995 farm bill is inacted.

The agencies have undertaken, to their credit, some partial evaluation work, which we should have noted in our testimony and did not. They are trying to look at four states, and they have upgraded some of their status review work and other oversight work. But it is not adequate to give us an idea of how much conservation is being achieved, how much it is costing or benefitting farmers, whether or not the procedures that SCS has in place are really adequate to find producers who are not in compliance with the law, and whether ASCS is acting properly when there are problems.

So our first area of recommendation is that the committee look very carefully at the program evaluation components of the budget that both SCS and ASCS will have this year.

If I could move to the wetlands reserve very quickly. President Clinton, as we know, has requested a very large amount of money for the wetlands reserve, basically enough to enroll 450,000 acres by USDA estimates. The total authorization requested is $370,260,000.

Early on, there were concerns that farmers would not be very interested at all in a program that required permanent easements. People were concerned that compared to the conservation reserves program that farmers would not respond if they had to tie up their land forever. And those critics have proved to be wrong based on the initial program in nine states, which was funded in fiscal year 1992.

In a substantial and really overwhelming response from farmers, 466,000 acres were offered. And we have whittled that down to about 49,000 acres that we think will be submitted ultimately in the program.

But what I really wanted to call attention to was Table 3 on page 5 where we just tried to sketch out the comparison between the conservation reserve program spending for the easements themselves, the easement payments themselves, and the conservation reserves program, CRP versus WRP.

Basically after ten years in Iowa and Wisconsin, right now the CRP is more expensive than the WRP, and you do not get the permanent protection. You get much less benefits environmentally.

When you look a couple of other states, Louisiana and Mississippi, you are within $100 for permanent protection versus CRP, where we are looking down the barrel now of 36 million acres coming out of contract starting in 1996. And everyone is wondering are we going to extend those contracts or are we going to bring that land back into production. The cattlemen are worried about

economic use. Everyone is concerned about it. And with the permanent program, it does look a little expensive on the front end for a number of these states. And if you are curious, we can talk about why a couple of the states are very high.

Then if you look at 20 years, and people are talking about extending CRP contracts another ten years in the 1995 farm bill, at least some of them, most of the states would show that relatively speaking per acre that the wetlands reserve program is very competitive.

So on that basis, we hope that the committee will look very carefully and favorably at the president's request. I know that it is a lot of money. But I think on cost effective grounds that a reasonable case can be made based on the pilot program that the wetlands reserve basically represents a very cost effective investment.

And then finally, I just wanted to touch briefly on your phrasing at the Public Voice conference abut green payments. You mentioned that there was a need to at least consider how to move agricultural assistance in a new direction.

There are a lot of issues that this subcommitee deals with that could lay the groundwork for that. In fact, in the past, they have laid the groundwork. Whether it is cost sharing for conservation practices, a long history of that. Support for extension programs that promote a more efficient use of inputs. Biological control. And in particular, the water quality incentives program, which we understand the president is contemplating this year $19 million of the ACP request be allocated to the water quality incentive programs.

But on the whole, we would hope that there would be a greater interest and greater investment across these areas, sustainable ag research and extension, biological control, and water quality, this year in the committee.

I think that it can lay the groundwork for the next evolution of agricultural policy that can benefit producers even as it protects the environment and natural resources.

I will leave my summary at that, Mr. Chairman. And if you have any questions. We would provide any of these data at the county level for anyone else on the committee who wants it. It is a little bit difficult, and I just want to call attention to that. It is a little bit difficult sometimes to go from county to congressional districts where you have a district line breaking through a county. And we have not been able to crack that one quite yet with ASCS either, but we are working on it.

Mr. DURBIN. Tell me, if you will. The whole question about appeals and benefits reinstated was raised when Mr. Bridge testified before our subcommittee. I want to make sure that I understand what your analysis of that is.

Do you feel that farmers are coming to understand that this is not going to be rigidly enforced. That if they file on appeal, they are going to win in most cases.

Mr. COOK. Well, that is the concern. It is our concern, and it was the Inspector General's concern, in basically all of the reports that I have seen where they have looked at enforcement actions, whether it is on the SCS side or the ASCS side. They are concerned that you simply cannot get effective enforcement, if time and again pro-

ducers are not initially cited for noncompliance, or if during the review process in ASCS or SCS that it is overturned.

We do not have a good way to track the number of those decisions and where they occurred. There is no system for doing that nationwide. And the documentation, you would almost have to look case by case at this stage. No data has been collected. And that is one reason that the evaluation is so important. That is our fear.

Mr. DURBIN. It is a hard thing to influence by an appropriation.

Mr. COOK. I understand. And yet at the same time, I think that the basic questions of the agency's request, which we do not have the details of, to see how much they are asking for in terms of program evaluation, was what we thought would be a very appropriate thing for this committee to consider.

In the past, they have not requested money to do this evaluation. And we are concerned that hidden there in the budget that there is not a request there again. And we would like to see that.

Mr. DURBIN. On another subject, some people have argued that the wetlands reserve program is a pretty expensive way to attack a problem that might be attacked a little differently and more cost effectively. Secretary Babbitt has talked about ecosystem development, trying to look at more of an intregated approach.

The people in my part of the world who get the most nervous about wetlands are concerned about that one wet field that ends up stopping them from putting any kind of drainage area that is much, much larger. But I take it from what you said that you are ready to buy into the wetlands reserve program as written.

Mr. COOK. Well, I think that the department to their credit have tried to proceed in a fairly careful manner in evaluating bids. And I would say other things being equal that yes, it would be good to be able to find more cost effective ways to do it. And that may involve extension work, educational work, and so forth.

The problem is that we are sort of lined up now with a whole bunch of regulatory programs facing these farmers, and society has not stepped forward and really said that if you want to protect wetlands, we are here to help you do it.

And in 1990 in the farm bill debate, which compared to the debate now over wetlands, was very smooth and very quiet. Bot sides agreed, because there was a balance. And that balance I think was struck in large measure when the environmental community came to the table and said we hear you, you do not want just a regulatory approach. You want society to say that wetlands are benefitting all of us, that all of us should be investing a little bit more.

I do not say that the wet reserve statute is perfect. And I am certainly not here to defend each and every bid that has been offered or will be. But I do think that there has been an evolution and some improvements since the CRP was initiated in 1985, which I think was a great program and is a great program. But I think that it has been made better conceptually for application to wetlands by the statute and by the Department's implementation. So we stand behind it.

Mr. DURBIN. So we will spend about $1.7 billion I believe this year on CRP.

Mr. COOK. Right.

Mr. DURBIN. And GAO recently came in with a report which you are probably aware of.

Mr. COOK. Very much.

Mr. DURBIN. Suggesting that we bought something for it, but not a lot. It was a temporary fix. It was consistent with setting aside erodable land. But at the end of the program, we still face the program.

I have raised the question and many have raised the question whether there is a better alternative, a cheaper alternative, and a more cost effective alternative to achieve these kinds of conservation practices.

Mr. COOK. I do not think that there is any question about that. And in the 1990 farm bill debate, the interesting thing was that the environmental community mostly supported management practices, and no further expansion of the CRP. There were some exceptions.

The sustainable agriculture working group I think has come forth with some excellent suggestions for partial enrollment of CRP for avoiding having to pay for whole fields.

But I think that GAO has not given full credit to the conservation reserve contracts and program in their report. That program would never have existed had it been simply a soil conservation program. It was income transfer at a time when we had also severe surplus production, and we had a farm credit system that was suing itself. And we had to get some money out there. Particularly in the wheat country, there was a great deal of concern that we have adequate income.

What I think that we have seen in the CRP is basically it has leveraged not just the 36 million acres protected, but also provided the ballast that allowed conservation compliance to be enacted, which affected 140 millions acres. And we are seeing tens of millions acres put into conservation tillage, and no till, and other management practices.

And in the long term, I think that is where you want to go for erosion control. We cannot afford to buy all of this land.

Mr. DURBIN. What do you think that we ought to be doing? You suggested that the president's request is inadequate—what do you think we should be doing on sustainable agricultural research and extension?

Mr. COOK. Well, we have not formulated a specific request idea on either of those programs at this stage. And the reason why is that we are still trying to evaluate what an effective investment would be in the context of the rest of the USDA budget. And we have not seen enough of the detail. We tried to be a little more careful.

We tend to look at the sustainable agriculture working group and their recommendations on those issues. I do not have one on the top of my head, but I would be happy to provide those to you. I know they have already presented testimony.

Mr. DURBIN. Thank you for your testimony. It was very interesting. You do good work, and give us plenty to think about. I thank you for your patience in waiting to testify.

Mr. COOK. Not at all. Thank you, Mr. Chairman.

Mr. DURBIN. I believe that is all. If there is anybody who was missed, I cannot imagine who it would be. But thank you for joining us.

[The prepared statement follows and a copy of Countdown to Compliance was provided for the Committee research.]

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Statement of
Kenneth A. Cook
Vice President for Policy
Center for Resource Economics[1]

Chairman Durbin, distinguished members of the subcommittee: thank you for this opportunity to comment on the FY 1994 budget for the U.S. Department of Agriculture and related agencies.

About The Center

I am Kenneth A. Cook, vice president for policy at the Center for Resource Economics, a not-for-profit environmental research organization based in Washington. Evaluation of federal programs and policies, combined with budgetary analysis of federal agencies that affect the environmental performance of the U.S. economy, form the heart of the Center's work. Next month, for example, our Environmental Budget Priorities project will release the first independent, detailed review of Environmental Protection Agency (EPA) programs and management, and will examine the impact of President Clinton's proposed EPA budget on the ability of the agency to meet its statutory obligations.

A major focus of the Center's work is the impact of agriculture and agricultural policy, including appropriations policy, on the environment, human health, natural resource management, and the rural economy. Over the coming year, it is our intention to evaluate the performance and budget needs of a number of important programs in the U.S. Department of Agriculture (USDA) that have significant implications for the environment and the rural economy. By this time next year, we hope to be able to present a comprehensive review of USDA programs and the FY 1995 USDA budget request.

Today's Testimony

In my testimony today I want to focus on two important environmental and resource management issues and one broad thematic issue that needs to be considered by the subcommittee as you develop the FY 1994 budget for USDA.

First, our research, like that of USDA's Office of Inspector General (OIG), indicates serious failures and irregularities on the part of the Soil Conservation Service (SCS) and the Agricultural Stabilization and Conservation Service (ASCS) in administering the resource compliance provisions of federal farm law: sodbuster, swampbuster, and conservation compliance. As a result, it appears that soil erosion and wetlands loss continue to be subsidized by taxpayers through a wide array of USDA programs. In addition to management reforms, USDA needs to conduct an expeditious and thorough evaluation of the implementation of sodbuster, swampbuster, and conservation compliance.

Second, our preliminary review of results from the pilot Wetlands Reserve Program (WRP) indicates to us that this program, relative to other conservation programs, promises to be a cost-effective conservation tool, in large measure because of the apparent willingness of farmers to accept permanent easements for conservation goals. We believe this cost-effectiveness should be taken into account as the subcommittee considers President Clinton's FY 1994 request of $370 million for the WRP.

Finally, we comment on some of the "infrastructure" issues that will need to be addressed by USDA programs if, as the Center anticipates, federal agricultural assistance continues to become more responsive to environmental protection and resource management objectives. In effect, these are the USDA program and

[1]Testimony presented to the Committee on Appropriations, Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies, April 20, 1993, Washington, D.C.

funding issues that will need special attention from this subcommittee if farm policy is to evolve toward "green payments," as you recently suggested, Chairman Durbin, in your remarks to the national food policy conference sponsored by Public Voice for Food and Health Policy.

Resource Compliance Implementation: Management Reforms & Evaluation Are Needed

In March, the Center published *Countdown To Compliance*, the second in a series of reports in which we analyzed information obtained from both SCS and ASCS to assess implementation of the sodbuster, swampbuster, and conservation compliance provisions of federal farm law.[2] Highlights of our report, derived from analysis of hundreds of thousands of USDA computer records obtained under the Freedom of Information Act, are summarized in Tables 1 and 2. For purposes of illustration, we have included in those tabulations data for the counties within Chairman Durbin's district, the 20th congressional district of Illinois. We would be pleased to provide similar data for other subcommittee members.

SCS Status Reviews Show Questionable Compliance Rates. SCS spot-checked over 97,000 tracts that had highly erodible land in 1992 and determined that on about 2.5 percent of those tracts, producers were not "actively applying" their conservation plans. In the counties within Illinois' 20th congressional district, the agency checked 1,210 tracts according to SCS headquarters records, and found 45 or 3.7 percent not actively applying. In both cases, this represents an increase in the number of non-compliance determinations made by SCS relative to 1991. Nationally, the number of non-complying tracts more than doubled; in the 20th district, the number quadrupled.[3]

Table 1.—Selected SCS status review results for highly erodible land: U.S. totals and 20th Congressional District of Illinois, 1991 and 1992.

	1992 SCS Spot Checks Tracts	1992 SCS Not Actively Applying number/(%)	1991 SCS Not Actively Applying number	HEL Compliance Plans#
U.S. Totals	97,826	2,494 (2.5%)	1,154	1,300,000
Illinois 20th District*	1,210	45 (3.7%)	11	20,867

#HEL compliance plan numbers were obtained from SCS National Headquarters in 1992 and may subsequently have been revised.

*Adams, Christian and Madison counties are split into more than one congressional district; observations for those counties may not fall within the 20th district. Analysis does not include the portion of Sangamon County located within the 20th district (City of Springfield).

Source: Compiled by the Center for Resource Economics (Farm Program Oversight Database) from SCS data.

As we reported in *Countdown to Compliance*, however, much higher rates of non-compliance were determined by the Office of Inspector General in its audit of the SCS status review process in 30 counties in 10 states in 1991.[4] OIG's sample of 359 tracts yielded 200 tracts on which practices were to be applied in 1991 or before. The audit determined that 21 of those tracts, or about 10 percent, were not in compliance. SCS had already completed status reviews on 5 of those 21 tracts where OIG found non-compliance, but none of the tracts had been reported for non-compliance by SCS. When we analyzed the results of the 1991 status review results for the same counties that OIG reviewed, we found that the OIG non-compliance rate of 10 percent was 33 times higher than the SCS non-compliance rate of 0.3 percent.

Benefits Denied Are Often Reinstated. In Table 2, we present information obtained from ASCS on the all highly erodible land and wetlands conservation violations between 1986, when those provisions took effect, and February of this year. Again, the tabulations present U.S. totals and, for illustrative purposes, results from the Chairman's (20th) district in Illinois.

[2]The first such report, *Subsidizing Soil Loss*, was published in May, 1992..

[3]Although we do not present the data in this table, considerable variation is found within the 20th district. Five counties reported no non-complying tracts, for example, while in five other counties the non-compliance rate exceeded 7 percent, nearly 3 times the national average.

[4]U.S. Dept. of Agriculture, Office of Inspector General. Audit Report No. 50600-3-KC, August, 1992.

Since 1986, a total of 2,499 farms (as defined by ASCS) have been listed as violating either sodbuster, swampbuster or conservation compliance. A total of $23.3 million in program benefits were denied. Our analysis showed, however, that $10.4 million of those benefits–about 45 percent– were reinstated as a result of the ASCS appeals process. In the 20th district of Illinois, 49 farms are reported in violation of the resource compliance provisions since 1986, and a total of $456,960 in benefits initially was withheld. After appeals, however, nearly 58 percent of those benefits ($264,259) were reinstated, a significantly higher proportion than the nationwide average. Six counties show no farms with violations, and in six counties over 80 percent of the benefits denied have subsequently been reinstated. Nationwide, we found a total of 764 counties in which at least some benefits were initially denied between 1986 and 1992. However, in half (381) of those counties, all of the benefits denied subsequently were reinstated.

Table 2.—ASCS benefits data for highly erodible land and wetlands conservation violations for counties in the 20th Congressional District of Illinois, 1986 to present.

Illinois 20th District County	*Sodbuster Swampbuster and Conservation Compliance Farms with Violations* 1986 to Present	*Calculable Benefits Denied* 1986 to Present	*Calculable Benefits Reinstated* 1986 to Present	*Percent Benefits Reinstated* 1986 to Present
Adams*	1	$16,022	$15,222	95%
Bond	0			
Brown	2	$1,634	$0	0%
Calhoun	1	$76	$0	0%
Christian*	0			
Clinton	0			
Fayette	7	$76,654	$9,664	13%
Greene	0			
Jefferson	1	$0	$0	No $ denied.
Jersey	4	$56,545	$55,470	98%
Macoupin	0			
Madison*	10	$102,652	$0	0%
Marion	13	$39,371	$35,624	90%
Montgomery	1	$1,758	$1,758	100%
Pike	2	$13,770	$11,524	84%
Schuyler	0			
Scott	1	$32,325	$31,325	97%
Washington	6	$116,153	$103,672	89%
IL 20th District Total	49	$456,960	$264,259	57.8%
U.S. Total	2,499	$23,341,385	$10,402,278	44.6%

*These counties are split into more than one congressional district; observations for those counties may not fall within the 20th district. Analysis does not include the portion of Sangamon County located within the 20th district (City of Springfield).
Source: Compiled by the Center for Resource Economics (Farm Program Oversight Database) from Agricultural Stabilization and Conservation Service data, updated as of February, 1993.

Again, it is instructive to compare these results with OIG's findings. Nationwide, for all provisions and all years, ASCS reports $10.4 million in benefits were denied after appeals. OIG estimated that the dollar value of non-compliance was twice that high ($20 million) for a 5 percent sample of highly erodible lands provisions (i.e., excluding swampbuster), for just one year (1991) and in only 10 states. If OIG's estimates are correct, it is likely that hundreds of millions of dollars of benefits should have been denied producers for resource compliance violations since 1986.

Implications for the FY 1994 Budget. In *Countdown to Compliance*, we recommended a number of management actions to USDA agencies to address three broad concerns: (1) SCS is failing to report farmers for non-compliance with their conservation plans; (2) a very large number of farmers found in violation received little or no penalty following the ASCS appeals process; and (3) USDA has taken no steps to implement the congressionally mandated, comprehensive evaluation of Conservation Title implementation, and as a result, taxpayers cannot be sure what those policies are accomplishing or costing farmers or society, or if the policies are being fairly yet firmly enforced.

We are encouraged by the response to our report from the national offices of ASCS and SCS. Both agencies are working to develop improved tracking systems for violations and appeals, and have been very cooperative in providing data and considering our suggestions for improved data collection. SCS has informed us by letter that it will act on or consider acting on all of our recommendations that fall within the agency's purview.[5] However, neither agency has deployed sufficient resources with which to conduct the thorough and expedited evaluation of conservation effects, farmer impacts, and the enforcement and appeals process. We recommend that the committee examine the adequacy of agency budgets for these activities. It is essential to have as clear an accounting as possible of Conservation Title implementation prior to the 1995 farm bill debate.

The adequacy of SCS resources as the conservation compliance deadline nears is another important budget issue. In general, we believe the agency could be doing a much better job with existing resources, some of which could be effectively redeployed. However, the SCS Conservation Technical Assistance budget cannot be evaluated until it can be separated from the combined budget of the proposed Farm Services Agency.

Wetlands Reserve Program: Forever Is A Long Time ... And It's Cost-Effective

President Clinton's budget request for USDA includes $370.26 million for the Wetlands Reserve Program (WRP) which would enable USDA to enroll an estimated 450,000 more acres in the program, putting it on back on track toward the 1 million acre goal Congress established for 1995. USDA budget documents indicate that the President will request $411 million in FY 1995 to enroll the remaining 500,000 acres. Last year and the year before, the subcommittee approved no funding for the WRP. In FY 1992, as a result of Senate action, $46 million was approved by Congress for a pilot program in 9 states. For the current fiscal year, no funds are available.

Some observers in the farm policy community predicted that few farmers would be interested in permanent easements for wetlands or other conservation purposes. They were wrong. Farmers' response to the WRP pilot program was overwhelming. Nearly 3,000 farmers responded with intentions to bid over 446,000 acres, almost half the full 5-year authorized level. The Center estimates, incidentally, that intentions to bid came from farms in 65 out of 138 congressional districts in the 9 states. In the end, 265 farms are expected to enroll nearly 50,000 acres. ASCS and SCS have prepared an excellent environmental and economic analysis of the pilot program.

Concerns have been raised about the costs of WRP easements and technical assistance in this first round. The best comparison of the WRP easement costs relative to other conservation programs is the Conservation Reserve Program. Last month, the General Accounting Office made the (painfully obvious) point that CRP "postpones environmental solutions" primarily because it is only a 10-year program. Ten-year contracts targeted to erodible lands marked a substantial improvement over pre-1985 year-to-year, untargeted set-asides, environmentally and (depending on markets) in budget terms. Permanent easements under WRP represent a further evolution of green payments. In Table 3, we present average CRP rental rates for states enrolled in the WRP pilot program.

After 10 years, taxpayers will actually spend less for a permanent easement on WRP in Iowa and Wisconsin than on the average CRP contract in those states. Many in the farm community are calling for another 10-year extension of at least some CRP contracts when the current set of contracts begins expiring in 1996. With a total of 20 years of CRP payments at current rates, the WRP will be hundreds to thousands of dollars per acre cheaper than the average CRP per acre rate in the pilot states.

[5]Letter from Galen Bridge, Acting Chief, Soil Conservation Service, 8 April 1993.

Table 3.—Comparison of average CRP rental payments with WRP easement payments, with 10 year and 20 year projections. Figures in parentheses indicate WRP payments are less than CRP payments.

	Average CRP	Total Payments	Total payments	WRP Easement	WRP vs. CRP	
	Rental Payment	Over 10 years	Over 20 years	Payments	10 yrs	20 yrs
State	*$ per acre*	*$ per acre*	*$ per acre*	*$ per acre*	*$ per acre difference*	
California	$48.94	$489	$979	$1,626	$1,137	$647
Iowa	$98.00	$980	$1,960	$958	($22)	($1,002)
Louisiana	$46.23	$462	$925	$491	$29	($434)
Minnesota	$60.10	$601	$1,202	$907	$306	($295)
Mississippi	$46.87	$469	$937	$561	$92	($376)
Missouri	$69.72	$697	$1,394	$862	$165	($532)
New York	$46.93	$469	$939	$2,525	$2,056	$1,586
North Carolina	$44.76	$448	$895	$623	$175	($272)
Wisconsin	$66.74	$667	$1,335	$629	($38)	($706)

Source: Center for Resource Economics, compiled from ASCS data. () indicates WRP payments are less than CRP.

Retirement of base acres makes the WRP even more cost effective. Over the next 5 years, ASCS estimates that deficiency payments will be reduced by $3.4 million because 10,000 base acres will be retired permanently in the WRP. Most of the savings are associated with the retirement of rice base, but overall the average is over $330 per acre over just 5 years. Likewise, a total of 2,056 CRP acres will be converted to WRP permanent easements, at a savings of $700,000, or nearly $340 per acre over 5 years, according to ASCS. Obviously, such a program would look extremely cost effective today had it been in place in the early 1980s. Moreover, future bids may be lowered as a result of greater competition and fuller consideration of the economic value of sustainable use activities (such as hunting) to WRP participants. We also believe that technical assistance costs will decline as experience with restoration planning accumulates in agency staff and economies of scale are realized in the planning process.

Implications for the FY 1994 Budget. The President's request for full funding for the WRP will likely result in very cost-effective conservation investments, particularly in light of the high environmental values that have been identified with prospective WRP contracts by ASCS, SCS, and the U.S. Fish and Wildlife Service. Based on this preliminary analysis, and the urgency of providing a significant, voluntary, incentives program to farmers who want to restore wetlands, we encourage the subcommittee to accept the President's recommendation.

Infrastructure For Green Payments

We share Chairman Durbin's expressed interest in a shift of agricultural assistance toward resource conservation and environmental objectives. The Wetlands Reserve Program is a vital step in that direction. In order to make the shift more fully, however, a number of USDA programs and activities will have to be significantly reformed and upgraded. In particular, we would call the committee's attention to the following:

Water Quality Incentives Program. A total of $19 million has been allocated within the Agricultural Conservation Program to implement this vital program. Significant additional resources will be needed for WQIP to meet its potential as a voluntary, incentives-based approach to farm-level water pollution prevention. Also, it makes sense to consider consolidation and prioritization of all USDA conservation assistance programs.

Sustainable Agriculture Research and Extension. No scheme of green payments can be expected to be cost-effective, profitable, and accessible to producers unless it is bolstered by a strong sustainable agriculture research and extension effort. The President's Request contemplates minor and inadequate increases for these activities for FY 1994. We urge the committee to look for ways to redirect existing research funding to these purposes.

Biological Control of Agricultural Pests. For a great many years, USDA research and extension efforts have given inadequate attention to biological means of controlling insects, disease, weeds, and other pests. A significantly increased effort is needed in this area.

Thank you for this opportunity to testify. We look forward to working with the subcommittee in the months ahead.

WEDNESDAY, APRIL 21, 1993.

CHILDREN'S NUTRITION RESEARCH CENTER

WITNESSES

HON. E De La GARZA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

HON. MICHAEL ANDREWS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

BUFORD NICHOLS, JR., M.D., DIRECTOR, CHILDREN'S NUTRITION RESEARCH CENTER

Mr. DURBIN. Our first witness this afternoon is Dr. Nichols from Children's Nutrition Research Center. It is my understanding they are going to ask Mike Andrews to say something.

Mr. ANDREWS. Mr. Chairman, it is a pleasure for me to be here with my distinguished colleagues. Dr. Nichols is synonymous before this committee. Dr. Nichols has been here in the past.

The Center within the Texas Medical Center is part of the nation's largest medical complex, and the largest employer in Houston right now. It employs about 55,000 people.

The CNRC is a unique and exciting place where research and health care, nutrition and food production all come together. I am particularly interested in the CNRC's efforts to fully activate the metabolic research unit and the work on teenage pregnancies for which it will be used.

Teenage mothers tend to have many more low birth weight babies. Many of these tiny babies stay in the hospital for 30 days at a cost of about $1,000 a day, and $2,000 a day if they are in intensive care.

These kinds of spiraling health care costs are of paramount concern to all of us. The CNRC's efforts to reduce the cost of health care through preventive measures such as better nutrition, are a wise investment of our resources, and I urge you to support their request and their efforts.

Thank you, Mr. Chairman.

Mr. DURBIN. Thank you, Congressman Andrews, and I would recognize at this point Dr. Nichols. Your entire statement will be made part of the record and if you would like to summarize at this point, we would appreciate it.

Dr. NICHOLS. Yes, it's a pleasure to be with you again. We are quite pleased to be here with our good friend, Mr. Andrews who has helped us in many, many ways with the center.

I do want to indicate that I have with me Marty Clayton. Marty is back at the door and is the director of federal relations for Baylor College of Medicine, and Mrs. Karen Konzelmann is here, who has just been placed at the clinic at CNRC by the extension

service to work as a national program leader for infant and maternal health.

This is the kind of linkage that we have been involved with for years, but this is a very important step forward as we try to see that the research done on maternal and infant nutrition is very quickly transformed into better health for the people of the United States.

I would like to say a word about the unique function of the Children's Nutrition Research Center. It has a job to link agricultural production and food processing together with medicine in order to make mothers and their babies happier.

We have many scientific accomplishments but I think the policy implication of linking food with health is a very important and we hope innovative in our society.

Your investment in the CNRC is producing results. For example, we have discovered that girls need a lot more calcium than we ever thought. We have been recommending for years that girls drink a lot of milk during their adolescent growth spurt because they've got to have strong bones, and they need extra calcium.

What we found is that they actually begin laying on that calcium at about nine or ten years of age, and by the time that they've completed their growth spurt, it is too late to give them that extra calcium they need for bone growth.

This has practical implications. I want to point out that about two-thirds of all dietary calcium comes from milk and this has obvious implications for the commodity programs as well as for the feeding programs of USDA such as the school lunch program, the WIC program, Food Stamps and that sort of thing.

We have also found that nursing mothers need about a third more protein than the current recommendations, and we believe that the food and nutrition service may increase the protein provided to women in the WIC program because of this discovery.

I would like to address for a moment a very high national priority, and that is knowledge of the way the diet interacts with growth and development of the teenage mother.

They actually know very little about their food needs, but we do know that there is a particular problem with teenage mothers because they produce more premature babies, they are more expensive, and what we need to do is find a way to prevent the high incidence of low birth weight in teenage mothers.

We are in the early stages of our work, and we have been absolutely amazed at the tremendous interaction of the metabolic cost of the growth spurt of adolescent women, plus the metabolic cost of pregnancy and lactation at the same time.

We specifically hope that you can provide us additional funding to fully carry out these studies on this high priority of food needs in the adolescent women who really are children having children.

I want to thank again the members of the subcommittee for the strong support you have given the CNRC in the past. You are investing in healthier children, and we think we are down the road in terms of providing leadership to the applied programs of this country to improve health of mothers and children.

Mr. DURBIN. I would like to recognize Chairman de la Garza, a man who needs no introduction in this committee. Thank you for joining us.

Mr. DE LA GARZA. Mr. Chairman, I apologize for being late but I got caught on the floor on the last vote and I wanted to come and join my colleagues and sit with Dr. Nichols as he presented to you an excellent presentation.

Let me say that from my perspective, Chairman of the Ag Committee and having done a lot of work with children, this is a very unique research center. It sits right in the middle of one of the major medical complexes in the world, but yet it is ours. It is agriculture.

The facility, not only the facility which you helped build, but the integral part of that facility which is the people who do the work there, do amazing work. I would like to invite you to come and visit the installation. It is a great facility.

And hopefully in June I will be able to accompany Dr. Nichols to Mexico, where they are doing work in an isolated village in Mexico, but the future, I just came from a meeting, Mr. Chairman, with the director of the Soviet education system in Moscow, in handling all of the school system in Moscow.

They are here, we were visiting with them about the possibility of utilizing peanut butter in their school lunch program. We have done a little bit through USDA. They have even made a purchase of peanut butter and we are working with our products, having them look at our school lunch program, how we do it.

But what I wanted to quote from him was the investment which we make is for the future of Russia. It is for our children, and I just heard him say it fifteen minutes ago, and this is what we are doing there.

It really should be called the international children's nutrition research center, but I commend it very sincerely and very strongly. This is not just another program, this is the future—research, technology, working with children that wouldn't have health care.

Yesterday also visiting with some representatives from Burma, working on other items, but in Burma, the figure they gave me was that there is over 25 percent infant mortality at this time in Burma. Mr. Chairman I commend to you very sincerely, the work that has been done by the Children's Nutrition Research Center in Houston.

Mr. DURBIN. Thank you, Mr. Chairman, and we are of the same mind on that, and I think it is one of the best investments we make through our various responsibilities in the field of agriculture.

Dr. Nichols, I visited the research center in New Orleans and they are developing some products which seem to hold some potential for your work. One of them is a product which I believe they called orange velvet. It is a combination of skim milk and orange juice which they have produced into a form that tastes like an orange milkshake.

It in effect would give a young person not only the Vitamin C in the orange juice, but also the calcium in what might be a more acceptable form.

You mentioned in your testimony that you worked with and through ARS. Are these kinds of developments leading to products that you are using or testing?

Dr. NICHOLS. The gentleman that prepared that product has given us a seminar, and when they get production up to the point, then we can test it. We certainly will. We will be very interested in testing that in populations which are not familiar with milk as a major source of protein and calcium in the diet.

Mr. DURBIN. You have said that you have suggested to WIC that they change their protein standard.

Dr. NICHOLS. Yes.

Mr. DURBIN. For nursing mothers?

Dr. NICHOLS. Yes.

Mr. DURBIN. Have they accepted your findings? Are they going to implement them?

Dr. NICHOLS. I can't say what the status is, but they are very interested and they have been talking to scientists who have been carrying this out.

Mr. DURBIN. Tell me a little bit about your work when it comes to nursing mothers. I understand that you are primarily analyzing the beneficial aspects of nursing.

Dr. NICHOLS. Well, we have looked both at the mother and at the infant, and there are a number of factors that are very difficult to match in commercial formulas that are present in human milk, and obviously the most difficult one is to adapt it for the day-to-day variations in the child's appetite, in the child's need.

We have also been studying the metabolism of the mother and we find that just as in pregnancy, and this is a principal well-known in animal science, that the metabolism turns over at a much higher rate than that necessarily associated with deposition of protein in milk or the deposition of protein in the growing fetus.

It's about a ten-fold magnification. It is as though all the metabolism is surrounding this developing organism, with a redundancy to protect the developing organism.

It is as though all the metabolism is surrounding this developing organism with a redundancy to protect the developing organism.

Mr. DURBIN. Mr. Skeen, do you have any questions?

Mr. SKEEN. Thank you, Mr. Chairman. Dr. Nichols, it is certainly a pleasure to have you here today and I am delighted that you came over and introduced the fellow that is here. [Laughter.]

This here is my first chairman, and we are always glad to see him back. I'm sorry I missed your testimony, but I understand it was very good, and I am very much interested.

I was astounded to learn from the research center in New Orleans that Americans today drink more soda pop than they drink water, and women particularly are exposed to osteoparosis because of the drop-off in the consumption of dairy products.

His question was I think very pertinent to those kinds of products and the expanded use of them.

Dr. NICHOLS. It is certainly a problem with teenagers too, because that's——

Mr. SKEEN. Absolutely.

Dr. NICHOLS. That's absolutely a negative impact on calcium absorption.

Mr. SKEEN. More for teenage girls than the males.

Dr. NICHOLS. Yes.

Mr. SKEEN. Because males are taught that the consumption of dairy products helps their athletic prowess so they stay with it a little longer, while the girls consumption drops off.

Thank you both.

Dr. NICHOLS. Thank you very much.

Mr. DURBIN. Thank you very much for joining us. Thank you, Mr. Chairman.

[The prepared statement follows:]

Testimony by

Dr. Buford L. Nichols, Jr., M.D.

Director

Children's Nutrition Research Center

Submitted to the

Subcommittee Agriculture, Rural Development,
FDA, and Related Agencies

Committee on Appropriations

U.S. House of Representatives

The Honorable Richard J. Durbin, Chairman

April 21, 1993

Testimony by
Dr. Buford L. Nichols, Jr., M.D.
Director
Children's Nutrition Research Center

Mr. Chairman and members of the Subcommittee, it is a privilege to submit our testimony to the Subcommittee on behalf of the Children's Nutrition Research Center (CNRC).

The Children's Nutrition Research Center is the only USDA nutrition research center dedicated to work on the food needs of mothers and of children from pregnancy through adolescence. We link agricultural production and food processing together with medicine to make mothers and their babies healthier.

We are unique in that, in addition to M.D.'s and Ph.D. human nutrition specialists, we also have on staff several swine nutrition scientists and a plant physiologist, who runs what is probably the only greenhouse located in a major medical center. We are also one of the world leaders in the technology of stable (non-radioactive) isotopes, which with our other unique facilities gives us the ability to do research that cannot be done anywhere else.

We also want our research to be used. In addition to working with other USDA research centers, we have for many years actively worked with Extension, WIC, Child Nutrition, and other USDA programs to speed the application of the fruits of our work. In fact, the Extension Service has just placed a National Program Leader for Infant and Maternal Health at the CNRC.

The CNRC has a long track record of producing excellent research results. In order to comply with the Subcommittee's requested limits on materials placed in the record I will mention only a few highlights.

Calcium Requirements for Children

CNRC work is leading the way to many changes in our basic nutritional recommendations. For example, we have found that current Recommended Daily Allowances, or RDA's, for calcium intake for girls from infancy through puberty are inadequate. In studies which have major implications for osteoporosis prevention, CNRC has discovered that calcium absorption and bone

growth in girls is significant at age 5-8, reaches a maximum at ages 8-13, and drops off substantially at age 15-16, or two years after menarche (first menstrual period). Current RDA's for age 1-10 are 800 milligrams per day of calcium (about 3 servings/day of dairy products), increasing to 1200 mg/day for ages 11-24. CNRC scientists believe that the RDA's need to be increased to reflect the fact that children need much more calcium at much younger ages than previously thought. We have also found that more than 85% of all girls over age 11 are not getting even the current insufficient RDA's of calcium.

Dairy products supply about 2/3 of all dietary calcium, so this research has obvious implications for USDA commodity programs as well as for USDA feeding programs such as school lunch, WIC, and Food Stamps. It also could have a major health impact in reducing osteoporosis later in life.

Protein Requirements for Nursing Mothers

CNRC research is playing a pivotal role in changing the RDAs of protein for nursing mothers as well. Current RDA's are based on measurements of the nutrients going out in breast milk. We have found that this measurement is just the tip of the iceberg, since lactation speeds up the mother's whole metabolism. Our work has shown that nursing mothers need 33% more protein than the current RDA amount. These results been sent by the Food and Nutrition Service to state nutritionists and may well result in an increase in the protein package provided to women in WIC programs.

We also have indications that RDA's for other nutrients may be too low as well.

Premature Infants

The CNRC has made a major impact in improving the feeding of premature infants. It costs about $1,000 per day to care for premature babies -- $2,000 if they are in intensive care. We are getting many of these preemies out of the hospital up to 10 days sooner by using new formulas and feeding techniques. CNRC has shown that preemies do not absorb carbohydrate energy as well as

full-term infants, and we are also doing studies on differences involving fats and other nutrients. We have also identified 2 growth factors in human milk, and one of these has been licensed for studies that may lead to its addition to baby formula.

Teenage Mothers

What payoffs can you expect in the future? Again, I will mention only a few. First, our work on the nutrient needs of nursing mothers leads to a very obvious and profound question: What about the nutrient needs of teenage mothers? We know that teenage mothers tend to have smaller babies. They also tend to have babies which are small relative to their gestational age, a measurement which is associated both with more severe medical problems in infancy and with increased risk of degenerative diseases later in life.

Teenage mothers are actually "children who are having children." But we know very little about their nutritional needs. We as a society have far too many teenage mothers, and we have a particularly large concentration of them, divided among many racial groups, in Houston. Although unfortunate for society, it provides us with an excellent pool of research subjects. If better nutrition can reduce the number of low birthweight babies, then the health care savings from this research investment could be enormous. We are working with the Extension Service to address this national priority.

Metabolic Research Unit

However, to do research on teenage mothers we need to bring them into our Metabolic Research Unit, or MRU. In the MRU we can closely monitor the amount and type of food they eat and the uses to which those foods are put. We do not have the funds to fully staff the MRU. We are the only USDA nutrition center that does not have a fully functional MRU, and we badly need that. The facilities are there, but we need additional funding of $3 million to fully staff and operate them. Currently our hours of operation are limited by the lack of staff to care for volunteers who are willing to come in.

Plant Physiology Unit

We also need to get our Plant Physiology Unit fully operational. This unit is in essence a very high-tech greenhouse. We have grown labeled rice, soybeans, and peas hydroponically in small batches to prove our methods, and we could grow other food crops as well. However, we need additional funds to grow larger quantities and to process them into formula and food for our studies.

By using this unit to produce foods that are labeled with stable isotopes, we can determine how a baby actually uses real foods and at how that bioavailability is impacted by processing methods. Most nutrition studies focus on nutrients, but farmers, food processors, and consumers are concerned with food, not just nutrients. Bridging that gap is an important part of our work.

We are working closely with ARS scientists at other locations, and we are developing, as a byproduct of our need to grow food plants with labeled nutrients, some intriguing information on how food plants grow and use nutrients. We can study nutrient uptake and use on a whole plant basis, not just at the soil-root interface. We are also focusing on critical windows for fertilizer application to reach the seeds, rather than leaves or stem, due to the expense of stable isotopes and the need to use them efficiently. This has obvious implications for production agriculture. ARS rice researchers have new information to explore based on the CNRC's ability to grow rice hydroponically at about twice the yield gotten in the field. Rice is one of many crops where researchers have not established a theoretical maximum yield. As with the MRU, the basic Plant Physiology Unit facility is already in place but additional funds of $2 million are needed to fully staff and operate it.

Cholesterol

The CNRC cadre of multi-disciplinary efforts includes USDA scientists who are working with specially-bred pigs. Among other things, they are coming up with some intriguing finding on cholesterol. They have shown that cholesterol, which is absent from current infant formulas, is vital for brain development. Piglets from low-cholesterol bloodlines become retarded on low-cholesterol diets -- you can actually pick them up without any fuss.

While most human babies can apparently make their own cholesterol, the pig results indicate that the genetic potential may be present for problems among some humans. We also think that dietary cholesterol in infancy may improve the body's ability to handle cholesterol in adulthood. This work could lead to major changes in infant formulas and recommendations for dietary cholesterol early in life.

Breastfeeding

The CNRC has been a leader in promoting breastfeeding for many years. Among other benefits, we have shown that feeding colostrum to newborn piglets gives a 700% increase in protein synthesis compared to those fed mature milk. CNRC scientists have also shown that the amino acid pattern in mother's milk is carefully tailored to the needs of the infant at any given age, and that this is true in many species besides humans. Infant formulas now in use seek to avoid shortages of any amino acid by providing about twice as much total protein as mother's milk. The baby must burn off the excess amino acids, which is one reason why formula fed babies have higher temperatures and heart rates, sweat more, etc. This line of research could lead to formulas that are better tailored to the age of the infant.

CNRC work has also proven that breast fed babies digest milk sugars more efficiently than do formula fed infants. A baby takes in about 3 times as much energy for its size as an adult does. A baby's colon acts like the rumen of a cow in fermenting

and absorbing the extra sugar. This has implications in diarrhea treatment, for example, since diarrhea prevents the fermentation and sharply reduces the baby's energy intake.

Infant Formulas

We are also working to improve infant formulas. Among other things, we are exploring differences in energy metabolism between breast and formula fed infants. Formula fed babies work harder, have higher temperatures and heart rates, and have different sleep patterns. We have already identified 2 growth factors in human milk, and one of these has already been licensed for studies that may lead to its addition to baby formula.

We are now working with Texas A&M University to make infant formula from labeled soybeans grown at the CNRC. We are also starting work with Cornell to put labeled nutrients into the artery leading to a cow's udder. This should not only tell us more about the cow's metabolism, but should also produce labeled milk which we can then make into formula. These labeled formulas can then be used in feeding studies to determine more precisely how babies use these foods to grow.

Conclusion

Our mission is to find ways to produce healthier children today and healthier adults tomorrow. As a byproduct, these studies will also help the nation's agricultural industry to produce more efficiently, to document the nutritional value of their products, and to tailor those products as necessary to better meet the nutritional needs of future generations.

We thank the members of this Subcommittee for the strong support that you have given the CNRC in the past. You are making a significant investment in children, healthy children who will, in turn, have an opportunity to contribute to the future of this country. We urge you to continue that investment by increasing the Center's operating budget by $5 million, to $16 million, so that we can fully carry out our mission as defined by Congress.

PLANT STRESS AND WATER CONSERVATION PROGRAM

WITNESSES

HON. BILL SARPALIUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

SAM E. CURL, DEAN, COLLEGE OF AGRIGULTURAL SCIENCES AND NATURAL RESOURCES

MR. DURBIN. Next I would like to introduce my colleague, Congressman Bill Sarpalius. He is here with representatives of Texas Tech University, the national champions, Dr. Sam Curl, Dr. Robert Albin, and Dr. Dick Auld.

If you would all please take seats at the table.

Congressman SARPALIUS.

Mr. SARPALIUS. Thank you very much, Mr. Chairman. I appreciate you allowing me the opportunity to speak before your committee on behalf of this very worthy project, and I also am pleased that you recognize the fact that Tech did win the national championship, and we are very proud of the ladies Red Raiders basketball team.

Mr. Chairman, you and I have had the opportunity to travel to many parts of the world and there is no question that as this country has been pleased with having an abundance of food available to the American people, we have seen parts of the world that have not been as blessed as we have been.

The Plant Stress and Water Conservation Laboratory at Texas Tech is studying the feasibility of developing different types of plants that can withstand different types of stress that are placed on those plants.

So the Federal Government has made an investment there relating to a plant stress lab. We have so far appropriated about $2.9 million towards the construction of this laboratory. We are now asking for an additional $8.6 million towards that construction which will complete the laboratory giving be a total investment from the Federal Government of $11.5 million.

We are also asking for an additional $300,000 that would be used for research within the laboratory. We are now appropriating $1,675,000 and we are asking for $1,975,000 for an increase of about $300,000.

I have with me today the leaders within the plant stress laboratory, the leaders of Texas Tech and individuals who are recognized as real scholars and leaders in agriculture, not only throughout the Texas Panhandle, High Plains area, but throughout the country.

I would strongly urge you to look at this laboratory, help us get it completed, get it on the way, on line because I assure you that we will benefit in the long run. We will be able to provide different types of crops that can be grown at places around the world where there is a very low amount of water that would be drought resistant crops, for an example.

In the Ag Committee, when we look at the problems we have with the crop insurance program every year we have to deal with a drought assistance bill. Research in this direction in the long run will save billions of dollars to American agriculture, and can save thousands of lives around the world.

Thank you, Mr. Chairman.

Mr. DURBIN. Thank you. At this point, I would like to recognize Dr. Sam Curl. We have your statement which will be included in the record, and if you would like to summarize or highlight it at this point with your colleagues, we would appreciate it.

Mr. CURL. Thank you, Mr. Chairman, Mr. Skeen, members of the committee, and thank you, Congressman Sarpalius.

I am Sam Curl, Dean of the College of Agricultural Sciences at Texas Tech University, and with me today are Dr. Bob Albin, our associate dean for research and Dr. Dick Auld, chairman of the Department of Agronomy, Horticulture and Entomology.

We are most appreciative for the opportunity to appear before you today on behalf of urgently needed construction of a national USDA plant stress and water conservation research laboratory on the Texas Tech campus, an advancement of the research program.

In 1978, a blue ribbon panel of scientists commissioned by USDA conducted a feasibility study that recommended the creation of this national laboratory to be located in Lubbock, Texas in conjunction with Texas Tech University.

In 1988, the 100th Congress and the President signed a Public Law 100–339 authorizing the establishment of the laboratory on the Texas Tech campus. This national laboratory will provide facilities for scientists to conduct broadly integrated research to improve crop stress tolerance to drought and temperature extremes.

Projections of continued water shortages and the usual temperature variations make the funding of this authorized laboratory critical to the research required to genetically alter crops to ensure tolerance to future climatic extremes.

USDA and USDAARS and Texas Tech University have put in place over the last 13 years a comprehensive integrated program which today involves the efforts of 17 senior scientists.

Two years ago Congress appropriated $1.3 million, and last year, $1.1 million was appropriated to initiated construction of Phase II of the project, the main laboratory.

An appropriation of $8.6 million is requested for fiscal year 1994 to complete laboratory construction. The original 1998 authorization of laboratory construction was for $27 million, so this request has been reduced considerably from our previous requests through reevaluation of program priorities and construction costs, and a closer integration of laboratory space with existing Texas Tech facilities.

Construction of the Phase I greenhouse using $500,000 of previously appropriate construction funds has been completed. Now, this plant that is being shown to you, the larger one, Dick, if you will hold that up, shows the final architectural rendering of the laboratory.

The other picture here being held by Dr. Albin shows the recently completed greenhouse, so architectural and engineering work has been completed and we are ready to begin construction on the main laboratory, and as I indicated, the greenhouse has been completed.

A further appropriation increase of $300,000 is requested for enhancement of the research program and for operation of the new research greenhouse.

Texas Tech University is providing 50 acres of prime campus land for the laboratory site, access to another 1,000 acres of crop land for field experiments, and ten faculty to cooperate with the USDA scientists in the research program.

The City of Lubbock has donated over $100,000 in providing utilities to the laboratory site.

Mr. Chairman, members of the committee, we appreciate your support and your continuing interest. We are grateful for your help. Thank you very much.

Mr. DURBIN. Thank you, Doctor, for joining us today. We have been working for a number of years, as I see here, in an effort to bring this all together.

Your request this year is an ambitious one, and I am hoping that we will be able to help you. I don't know that we will be able to meet the exact number that you have asked for. But we understand the importance of this project, as Congressman Sarpalius has mentioned, not only for us but for other countries and other people who rely on this valuable research.

Mr. CURL. Thank you.

Mr. DURBIN. I might add that Bill shared with me on the way over here that we have groups around here who have appointed themselves the watch dogs of the Treasury, and Bill. You might recount that story about a plant.

Mr. CURL. Jim, they are very aware of that story. And basically the story is there are those that believe when you are talking about plant stress, I guess they think we're talking about the emotional stress plants go through.

Mr. DURBIN. That's right. We are doing our best to educate our colleagues. Some of them are not within that realm of being educated.

We have another Texas graduate here, but not from Texas Tech, my colleague, Joe Skeen.

Mr. SKEEN. I am an honorary graduate of Texas Tech.

Mr. DURBIN. You certainly are.

Mr. SKEEN. I have done enough work in the last six or eight years for Texas Tech.

Mr. CURL. That's right, we certainly claim you.

Mr. SKEEN. Doctors, I am delighted that you are here. You know, we initiated that plant stress consortium back in the early 1980s.

Mr. CURL. Yes, sir.

Mr. SKEEN. And I like to think I had a significant part in its conception. You have been certainly one of the stellar institutions involved in that activity and I think it has meant an awful lot to us in the southwest because we have very unique problems. We put together a consortium that had a good base, stretching all the way from the panhandle of Texas to Southern California. I think you have done an outstanding job, and we're going to get this laboratory built one way or another. It may take a while.

Mr. CURL. Thank you, sir.

Mr. SKEEN. Thank you all for the presentation.

Mr. CURL. We appreciate it very much.

Mr. DURBIN. Thank you. Congressman Pastor, do you have any questions?

Mr. PASTOR. No questions.

Mr. DURBIN. All right. Thank you for joining us.
Mr. CURL. Thank you.
[The statement follows:]

PUBLIC STATEMENT
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE
ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION,
AND RELATED AGENCIES

ON BEHALF OF

A REQUEST TO CONSTRUCT PHASE II OF THE PLANT STRESS AND
WATER CONSERVATION RESEARCH LABORATORY
(AUTHORIZED BY PUBLIC LAW 100-339) AND A REQUEST FOR ENHANCED SUPPORT FOR TH
USDA/ARS PLANT STRESS AND WATER CONSERVATION RESEARCH PROGRAM AT
TEXAS TECH UNIVERSITY
LUBBOCK, TEXAS

Presented by

Dr. Sam E. Curl
Dean
College of Agricultural Sciences and Natural Resources
Texas Tech University

April 21, 1993
Washington, D.C.

The Honorable Richard Durbin
Chairman, Appropriations Subcommittee on Agriculture,
Rural Development, Food and Drug Administration, and Related Agencies
United States House of Representatives

The Honorable Larry Combest
Congressman for the 19th Texas District
United States House of Representatives

67-181 O—93——30

SUMMARY

PHASE II CONSTRUCTION FUNDS FOR THE USDA/ARS PLANT STRESS AND WATER CONSERVATION RESEARCH LABORATORY AUTHORIZED IN 1988 BY P.L. 100-339 AND A REQUEST FOR ENHANCED PROGRAM SUPPORT. The USDA/ARS PROGRAM AND LABORATORY LOCATED AT LUBBOCK, TEXAS, CONDUCTS RESEARCH IN COOPERATION WITH TEXAS TECH UNIVERSITY AND THE TEXAS AGRICULTURAL EXPERIMENT STATION.

SPECIFIC ACTION REQUESTED OF THE COMMITTEE: It is requested that Congress appropriate $8.6M to complement the $1.3M and $1.1M appropriated for FY 92 and FY 93, respectively, for construction of Phase II of the Plant Stress and Water Conservation Research Laboratory authorized by the 100TH CONGRESS through PUBLIC LAW 100-339. Construction funds of $500,000 were appropriated for Phase I of Laboratory construction (the greenhouse-headhouse has been constructed). Total construction costs (Phases I and II) will amount to $11.5M. Architectural and engineering planning for Phase II (main laboratory) is at 95% completion. The building will be constructed on the Texas Tech University campus on a 50 acre tract of land leased to USDA/ARS by the Texas Tech University Board of Regents.

A request for a $300,000 increase in the Plant Stress and Water Conservation Research Program appropriation is also made to increase funding of the research program and for operation of the new greenhouse. The research effort will continue to focus on understanding the genetic control of plant mechanisms which facilitate drought and heat tolerance in crop plants.

JUSTIFICATION: The action of the federal government in 1988 through PUBLIC LAW 100-339 authorizing a plant stress and water conservation research laboratory and program at Lubbock, Texas was very timely and will have a substantial impact on food production and environmental quality for decades to come. The Greenhouse Effect resulting from increased atmospheric carbon dioxide, Global Warming induced climatic changes, and the extensive drought during the summer of 1988 and during the past five years in California are ready examples of the fragility of our managed and natural ecosystems, and the potential fo, reduction in food and fiber quantity from even modest changes in weather patterns.

The formal plant stress and water conservation program was initiated in 1979 after 20 years of feasibility studies and planning by agencies of the federal government. The federal government through USDA/ARS, and the State of Texas through Texas Tech University and the Texas Agricultural Experiment Station, have put in place over the last 13 years a comprehensive-integrated program in which 17 senior scientists are today working to develop improved crop plants and planting systems that will provide for economically optimal crop production under variable, extreme environmental conditions. Scientists with expertise in the broad areas of genetics, breeding and molecular biology; biochemistry and physiology; and climatology, soil science and systems research have research programs poised for the challenges of the predicted climatic changes forecast within the next several decades. This program will be greatly enhanced, and its potential fulfilled, with the construction of a laboratory on the Texas Tech campus in conjunction with a broad array of established basic sciences. Additional program dollars will fill existing gaps in the continuum of technology transfer from laboratory molecular technologies to field applications of genetically modified plants exhibiting improved stress tolerance.

INTRODUCTION

Mr. Chairman, I greatly appreciate the opportunity to appear before the Committee today to request that Congress appropriate $8.6M for construction and design review of Phase II of the USDA/ARS Plant Stress and Water Conservation Research Laboratory at Lubbock, Texas authorized by the 100TH CONGRESS through PUBLIC LAW 100-339. We are also requesting that Congress appropriate $300,000 to enhance the research program and for operation of the new greenhouse. The research effort will continue to focus on understanding the genetic control of plant mechanisms which facilitate drought and heat tolerance in crop plants. This vital research is encompassed in the comprehensive nationwide research mission of the U. S. Department of Agriculture/Agricultural Research Service, and the research program implements the recommendations of the Plant Stress and Soil Water Conservation feasibility study prepared by the USDA/ARS.

The action of the Federal Government in 1988 through PUBLIC LAW 100-339 authorizing a plant stress and water conservation research laboratory and program at Lubbock, Texas was very timely and will have a substantial impact on food production and environmental quality for decades to come. The Greenhouse Effect resulting from increased atmospheric carbon dioxide and other gases, Global Warming induced climatic changes, and the extensive drought during the summer of 1988 and during the past five years in California are ready examples of the fragility of our managed and natural ecosystems, and the potential for reduction in food and fiber quantity from even modest changes in weather patterns.

The background setting for the problem which the research program addresses is found in Senate Document 59, the feasibility study conducted by the Science and Education Administration of USDA in 1977, and the statement of Texas Tech University submitted for the record before this committee on March 26, 1979. We will not repeat this information, as we believe the record is replete with scientific and economic documentation prepared by a select committee which describes the conditions of the region and the research required to seek viable solutions to a complex set of critical problems confronting the areas of agriculture, natural resource conservation and environmental protection. The need for a comprehensive, multidisciplinary, long-term basic science research program is obvious. Texas Tech University has taken the lead in the development of a cooperative research program with the USDA/ARS, the Texas Agricultural Experiment Station, colleges, universities, and federal laboratories throughout the region, agricultural producers, the agribusiness industry, and private research organizations.

BACKGROUND

The key planning events involving Texas Tech University which have taken place in conjunction with the development of the research program and laboratory to date are as follows:

1975-1976: Preliminary discussions with officials of the U. S. Department of Agriculture and members of the Congress.

1977-1978: Congress appropriated $100,000 for a feasibility study. The study team concluded that there was an urgent need for a plant stress and water conservation research program and that Lubbock, Texas, was the ideal location for a laboratory facility. A later decision to locate the facility on the campus of Texas Tech University, in conjunction with the College of Agricultural Sciences, finalized the first major step in the development of the program.

1978-1979: Congress appropriated $800,000 for the preparation of a research program plan and architectural and engineering plans for the appropriate laboratory in which to carry out the proposed research. The Science and Education Administration in August, 1979, transferred a USDA/ARS scientist (plant physiologist) to Lubbock, Texas to serve as a cooperative scientist working with Texas Tech and Texas Agricultural Experiment Station scientists on environmental

stress mechanisms in sorghum and cotton. Texas Tech provides office and laboratory space and use of the library, computer, and other University facilities as well as extending full faculty privileges to the USDA/ARS scientists.

1980-1981: Congress appropriated $200,000 to initiate basic research on the problem.

1983-1984: Congress appropriated funds for completion of the architectural and engineering plans.

1988-1989: Congress passed and the President signed into law PUBLIC LAW 100-339 which authorizes construction of the Plant Stress and Water Conservation Research Laboratory on the campus of Texas Tech University.

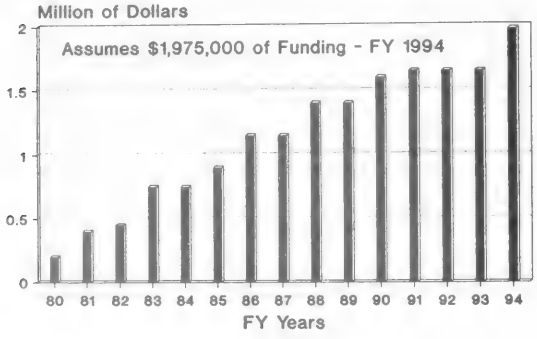
1989-1990: Congress appropriated $500,000 to construct Phase I of the Plant Stress and Water Conservation Research Laboratory.

1990-1991: Congress appropriated $600,000 to complete the architectural and engineering plans for Phase II (the main laboratory) and $75,000 to enhance the ongoing cooperative research program, bringing total research program funding to $1,675,000.

1991-1992: Congress appropriated $1,300,000 for initiation of construction of Phase II (the main laboratory).

1992-1993: Congress appropriated $1,100,000 for construction of Phase II (the main laboratory).

Funding for the USDA/ARS & TTU Plant Stress and Water Conservation Program



RESEARCH MISSION AND ACTIVITY TO DATE

The mission of the Plant Stress and Water Conservation Research Program is to develop a detailed understanding of how plants survive and grow when exposed to extreme temperatures and limited moisture. This knowledge is used to develop improved varieties and crop production systems for cotton, wheat, sorghum and forage crops that insure greater water use efficiency, improved drought tolerance and increased winter hardiness. This research is critical to the future success of the agricultural industry of the Great Plains region of the central U.S. where environmental extremes cause millions of dollars of losses in crop production each year. Reduction of these annual losses would stabilize the economy of this region while improving the ability of the American farmer to compete in domestic and export markets for

agricultural commodities. The Plant Stress and Water Conservation Research Program has concentrated in three specific areas: Stress Physiology; Genetic Enhancement; and Advanced Production Systems.

Stress Physiology:

The specific objective of research in stress physiology is to identify and understand the structural and biochemical mechanisms in higher plants that could mediate the impact of environmental extremes. These studies have concentrated on the evaluation of those weed and crop species which grow in the driest deserts and coldest regions of our planet. Scientists have isolated specific morphological modifications, enzymes and proteins that drastically reduce the damage caused to plants exposed to environmental stress. Only recently have the first of the hundreds of genes available from these exotic species been fully characterized.

Genetic Enhancement:

Plant physiologists work cooperatively with molecular biologists to isolate the specific DNA sequences needed to synthesize the unique proteins and enzymes that reduce environmental stress. The plant stress DNA sequences are combined with other regions of DNA that regulate gene expression to insure that the selected stress genes are "turned on" only when the crop plants are exposed to specific environmental conditions. These carefully designed plant stress genes are then introduced into bacterial cells to generate the millions of additional copies needed for incorporation into a crop plant.

Cell biologists have developed several innovative techniques to introduce these genes into individual cells or intact plants of cotton and alfalfa. Only in a small proportion of the cells exposed to the plant stress genes will the introduced DNA be incorporated into the original DNA of the crop species resulting in a transformed plant. Scientists worldwide are still working on similar techniques to allow transformation in wheat and sorghum.

Plant breeders and molecular biologists have only recently begun to select among thousands of transgenetic plants for appropriate expression of the introduced genes. Only after extensive and carefully controlled evaluation under laboratory conditions are transformed plants evaluated under field conditions.

Agronomists are evaluating the impact of row orientation, row spacing/plant populations, nitrogen fertilization and water management to optimize economic yields under both dryland and irrigated conditions. These cultural practices have a drastic impact on the efficiency of critical physiological processes such as photosynthesis, nitrogen metabolism and carbon metabolism as well as soil water and crop canopy temperature relationships. Optimization of the soils and crop production environment is essential to ensuring economic crop production.

POTENTIAL ECONOMIC IMPACT

Insuring that the U.S. farmer is economically competitive in both domestic and export markets is essential to the future of American agriculture. Use of genetically enhanced varieties and advanced production systems to improve the efficiency of producing major crop commodities has the potential to revolutionize American agriculture. These technologies are beginning to be applied in specific production regions worldwide to improve the efficiency and stability of crop production. Any country or geographic region not participating fully in this revolution will become increasingly less efficient and less competitive in both domestic and international agricultural markets. If the agricultural industry of the Great Plains is to survive in this highly competitive global environment, it is essential that the U.S. lead and not follow in the application of leading edge science to this industry. The successful efforts of the Plant Stress and Water Conservation Laboratory will allow future generations of American farmers to produce crops for food during extremely cold winters or hot, dry summers and in direct competition for international crop commodity markets.

RURAL TELEPHONE PROGRAM

WITNESS

JOHN O'NEAL, GENERAL COUNSEL, NATIONAL RURAL TELECON ASSOCIATION

Mr. DURBIN. John O'Neal, with National Rural Telecom Association.

Mr. O'NEAL. Thank you, Mr. Chairman.

Mr. DURBIN. Thanks for joining us.

Mr. O'NEAL. Members of the committee. I know the committee's time is very limited and so I will summarize my statement and be very brief today.

It is a pleasure to appear before you again this year in support of a continuation of a strong REA telephone program.

For the record, I am John F. O'Neal, General Counsel of the National Rural Telecom Association. NRTA is comprised of commercial telephone companies that borrow their capital needs from the Rural Electrification Administration to extend and modernize telephone service in rural areas.

Approximately one thousand or 71 percent of the nation's telephone companies borrow from REA. About three-fourths of these are commercial telephone companies.

R.E.A. borrowers serve almost 6 million subscribers in 46 states. Excepting loan funds, these borrowers assume an act of obligation to serve the widest number of people within their service territory.

Approximately $10 billion has been loaned in the program, almost $3 billion in principal has been repaid, and almost $4 billion in interest has been paid by these telephone borrowers.

I am proud to report today that REA telephone systems are doing the job that Congress has asked them to do, and they are doing it very well. There has never been a default in the REA telephone program. All loans have been paid with interest in accordance with their terms.

Mr. Chairman, the President's fiscal year 1994 budget proposes to maintain telephone programs at loan levels enacted for fiscal 1993, and as a part of the President's investment package for rural development, proposes to increase loan levels in the insured and rural telephone bank programs by $25 million each.

We wholeheartedly support the President's initiatives for enhancement and expansion of the rural telephone program, along with the inherent recognition of the significant role expected of this program in the future.

Rural telecommunications infrastructure development is essential to the accomplishment of the President's revitalization package objectives. Telecommunications plant and technology is the most basic aspect of today's rural development.

In addition, the REA telephone program meets other stated objectives of the President in connection with his economic program. It creates jobs. It represents investment spending rather than consumption spending. It is bringing new life to rural communities and is building our country through investments in infrastructure.

The REA telephone loan program is truly a program that is in step with the economic and political needs of our time.

On the other hand, we oppose the President's proposal which calls for elimination of subsidies in the REA insured program, because these increased costs would be passed on to rural rate payers who are already burdened with increasingly high rates for service.

Other than program administrative costs, these subsidies in the insured program represent the only significant cost to the taxpayer of the entire REA telephone program.

It is our firm belief that the value of this assistance to rural rate payers far outweighs the cost to the taxpayer. The President exclaimed in his economic message to Congress, we ought to be subsidizing the things that work.

We agree with that assessment. The REA telephone loan program does work, and it works effectively. The REA program has a proud record and unlimited future potential for our country.

Thank you very much for the opportunity to present our views today.

Mr. DURBIN. Thank you, Mr. O'Neal. Can you tell us what the differences might be between the telephone rates paid by rural rate payers, as opposed to those living in cities?

Mr. O'NEAL. I don't have a study at my disposal with current information on that. I do know that prior administrations have studied that issue and they have determined that rural rates are substantially higher than urban telephone rates, and course, one thing that the committee has to bear in mind is that the scope of calling area and the value of the service provided is very important in that equation.

In other words, if you, for $20 a month, if you can only call 300 people as a local call, that doesn't equate very effectively with a $20 telephone rate in New York City where you can call 8 or 10 million people as a local call.

Most of these calls in rural areas to the doctor, to the school, and to other essential businesses, are long distance calls in many cases.

Mr. DURBIN. Thank you very much. Mr. Skeen?

Mr. SKEEN. Thank you, Mr. Chairman. I wholeheartedly support your effort, because I am the last Member of Congress to get a phone.

Mr. O'NEAL. I realized that, Mr. Skeen. I am glad you have one.

Mr. SKEEN. I spent 20 years with my own communication system through radios, a single line telephone system I built myself. I was delighted to see RTA come in and take over that work.

Now I can call home and usually get somebody.

Mr. O'NEAL. I remember proudly that day when they hooked you up. [Laughter.]

Mr. SKEEN. Thank you very much.

Mr. O'NEAL. Thank you.

Mr. DURBIN. I think you called me that day.

Thanks very much for your testimony.

Mr. O'NEAL. Thanks, Mr. Chairman.

[The prepared statement follows:]

STATEMENT PREPARED FOR THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FDA, AND RELATED AGENCIES OF THE HOUSE COMMITTEE ON APPROPRIATIONS

JOHN F. O'NEAL
GENERAL COUNSEL
NATIONAL RURAL TELECOM ASSOCIATION

April 21, 1993

SUMMARY OF TESTIMONY REQUESTS

Project involved: Telephone loan programs administered by the Rural Electrification Administration

Actions proposed: Supporting the President's request for continuation in FY 1994 of loan levels for the insured, guaranteed and Rural Telephone Bank lending programs in the ranges authorized for FY 1993 and the requests contained in the investment package for $25 million increases in loan levels in the insured and Rural Telephone Bank loan programs, respectively. Opposed to the President's request to eliminate the subsidy cost in the insured telephone loan program.

Mr. Chairman, Members of the Committee:

My name is John F. O'Neal. I am General Counsel of the National Rural Telecom Association. Our association is comprised primarily of commercial telephone companies which borrow their capital needs from the Rural Electrification Administration to furnish and improve telephone service in rural areas. Approximately 1000, or 71% of the nation's telephone companies borrow from REA. About three-fourths of these are commercial telephone companies. REA borrowers serve almost 6 million subscribers in 46 states and employ over 28,000 people. In accepting these loan funds, borrowers assume an obligation under the act to serve the widest practical number of rural users within their service area.

Background

Rural telephone systems have an ongoing need for long-term capital at affordable interest rates. Since 1949, that capital has been provided through telephone loan programs

administered by REA. Telephone loans are made "to furnish and improve" local telephone service in rural areas. A rural area is defined in the Act as those areas not included in the boundaries of a city or town which has a population in excess of 1500 inhabitants.

REA loans are made exclusively for capital improvements and loan funds are segregated from the borrower's operating revenues. Loans are not made to subsidize operating revenues or profits of the borrower system. There is a proscription in the Act against loans which would duplicate facilities and state authority to regulate telephone service is expressly preserved.

Rural telephone systems operate at a severe geographical handicap when compared with other telephone companies. While almost 6 million rural telephone subscribers receive telephone service from REA borrower systems, they account for only four percent of total U.S. subscribers. On the other hand, borrower service territories total 37 percent of the land area -- nearly 1½ million squares miles. The average REA borrower serves about six subscribers per mile of telephone line and have more than 1,000 route miles of lines in their systems.

Because of low-density and the inherently high cost of servicing these areas, Congress made loan funds available at subsidized rates of interest to assure that rural telephone subscribers, the ultimate beneficiaries of this program, have comparable telephone service with their urban counterparts at affordable subscriber rates. This principle is especially important and valid today as the U.S. enters the "Information Age" with customers and regulators constantly demanding improved services.

Without the REA program the quality of telephone service in rural areas would deteriorate. The REA Act imposes a higher standard of service than otherwise is required of local telephone systems. Before REA, if carriers provided service at all in rural areas it was only down the main roads because service on any other basis was not economically feasible. Today, thanks to the Congress and the REA, telephone service is provided to the "widest practical number of rural users" in each borrower's service area -- a mandate that REA strictly enforces and a standard of service that the borrower assumes when it receives a loan from REA.

Mr. Chairman, continuation of a strong REA program is very important to rural America. This Committee and the Congress as a whole have strongly supported the REA telephone program since its inception in 1949. We appreciate your past efforts and look forward to an even stronger REA program for the future.

We are proud to state once again for the record that there has never been a default in the REA telephone program. All loans have been repaid in accordance with their terms with interest. At the end of FY 1992, a total of over $6.50 billion in principal and interest had been paid by borrowers.

Need For The REA Telephone Loan Program Continues

The need for the REA loan program is as great today as ever before, possibly even greater than in the past. Much of the telephone loop plant in rural America was installed in the early 1950's and will soon be due for replacement. Technological advances make it imperative that rural telephone companies upgrade their systems to keep pace with these improvements and provide the latest available technology to their subscribers.

As the rural infrastructure keeps evolving, the potential benefits for rural life and the rural economy are impressive. Interactive optical fiber can provide education opportunities in even the smallest towns comparable to hiring many extra teachers. Using communications for medical diagnosis, monitoring and even treatments like heart defibrillation can help combat the shortage of doctors and the rash of rural hospital closings. Improved emergency services can save lives. For example, telephone systems are working at improving the ability of the 911 emergency system to recognize the location from which emergency calls originate to allow faster response. Businesses like telemarketing and insurance can thrive in rural areas, and telecommuting can become a realistic employment option. The REA programs are already providing financing for digital switches, more fiber between central offices and for school and medical communications facilities, helping rural communities to reap the benefits of technology.

In addition, rural Americans continue the struggle to revitalize their rural economies. In light of the fact that both Congress and the President have indicated that telecommunications enhancement is a significant part of such development, the need for affordable capital to finance technological upgrading is greater than ever.

The explosive pace of technological development offers new opportunities for rural America. New systems can take advantage of major breakthroughs in what computers can do and how much capacity and speed can be made available for data, voice or video transmissions. But falling behind metropolitan areas in infrastructure development could spell a dim, non-competitive future for small, rural communities.

An immediate need for many small systems is to equip their networks for participation in the new public switched network signaling technology know as SS7. SS7 will provide basic call set-up, routing, billing, credit card validation and other functions more efficiently. This technologically advanced signaling also will enable rural areas to reap the benefits of Integrated Services Digital Network (ISDN) linked to networks and services across the nation. The new signalling technology will also allow number portability, so 800 service customers can change long distance carriers without changing their call-in telephone numbers. SS7 opens up opportunities for "intelligent network" services, such as Custom Local Area Signaling Service (CLASS) Services, transactional services, and even tomorrow's individual telephone number that can receive calls wherever its "owner" travels. These network upgrades will help each rural customer tap into information resources across the country.

The costs of SS7 participation are considerable. For example, one small company executive testified several years ago that her company would need to invest more than $450,000 to bring SS7 technology to her service area.

A nationwide broadband network has also been heralded as a national infrastructure goal, needed to keep this country globally competitive and improve the qualify of life. For example, The Alliance for Public Technology recently recommended upgrading the public switched telephone network to make interactive broadband "platform" universally available. Rural areas cannot afford to be left out of the interactive capabilities broadband technology will provide to urban and suburban users.

These facts offer conclusive proof that the REA program is as necessary today as it has ever been. This continued need has been confirmed in four recent studies, three of which are sponsored by the federal government. Congress concurred with these studies when in its Rural Telecommunications Improvements Act of 1990 it reaffirmed the continuing importance of the REA telephone loan program and called on the program to play an even greater role in rural America.

These rapid technological changes and federal policies of competition and deregulation in the telephone industry underscore the continuing need for targeted assistance to rural areas. Also, the inherently higher costs to serve these areas have not abated. For example, a recent Southwestern Bell study showed that transport costs for its low volume areas are almost ten times higher than for its areas with higher traffic volumes. Regulatory trends towards encouraging competition with telephone systems increase pressures to shift more costs onto rural ratepayers. Interstate subscriber line charges of $3.50 have already shifted costs to customers. Pressures to recover more and more of the higher costs of rural service from rural customers to foster urban competitive responses will further burden rural consumers. And, as rural rates rise, small systems will tend to lose confidence that they can recover the investments for costly network upgrades.

The amount of loan applications pending at REA are indicative of the increasing demands for improved service. At the end of FY 1992, completed telephone loan applications and loans carried over into the new fiscal year totaled $221 million. The attached chart indicating the current state-by-state status of telephone loan program applications shows that the amount has increased to almost $300 million in the first four months of FY 1993 despite loan approvals of $111 million during that same period. I know the Committee will agree that these figures, furnished by REA, amply demonstrate the ongoing need for this important program at current levels.

UNAPPROVED REA TELEPHONE LOAN APPLICATIONS ON HAND JANUARY 31, 1993*

STATE	NUMBER OF APPLICATIONS	$ AMOUNT OF APPLICATIONS
GA	2	$ 34,672,000
IN	2	9,414,300
IA	2	3,864,000
ME	1	2,645,000
MH	1	3,999,000
MN	2	8,084,550
MS	1	1,656,900
MT	1	11,183,000
NM	1	3,339,000
NY	2	4,622,000
NC	2	6,064,500
ND	2	7,953,000
OK	6	48,300,000
OR	1	10,310,000
PA	1	455,700
SD	1	11,685,000
TN	2	23,527,000
TX	2	3,526,000
UT	1	5,522,000
VA	2	12,173,000
WA	1	4,497,150
WI	6	68,700,350
TOTALS	42	286,193,450

*Source: Rural Electrification Administration

NOTE: In addition, during the first four months of FY 1993, the agency has approved 21 new telephone program loans totaling $111 million.

The Clinton Administration's FY 1994 Budget Proposal

The President's FY 1994 Budget proposes to maintain the telephone program at loan levels enacted for FY 1993 and, as a part of the President's investment package for the Rural Development initiative, proposes to increase loan levels in the insured and Rural Telephone Bank programs by $25 million each. The additional $50 million is requested to be reserved for distance learning, medical link and other telecommunications modernization projects.

We wholeheartedly support the President's initiatives for enhancement and expansion of the rural telephone program and the inherent recognition of the significant role expected of this program in the future. Rural telecommunications infrastructure development is essential to the accomplishment of the President's revitalization package objectives. Telecommunications plant and technology is the most basic aspect of today's rural development.

In addition, the REA telephone program meets other stated objectives of the President in connection with his economic program. It creates jobs, represents "investment" spending rather than "consumption" spending, is bringing new life to rural communities and is building our country through investments in infrastructure. It is truly a program that is in step with the economic and political needs of our time.

The FY 1994 Budget proposal also calls for elimination of all subsidies in the REA insured program with the exception of the $25 million earmarked for "distance learning and medical link and other telecommunications modernization projects." At current interest rates this would mean raising insured loan interest rates from 5 percent to the long-term Treasury Rate (6.8 percent). In the telephone program, this would achieve savings of only $7.5 million in FY 1994 and $103.5 million over four years as projected in the Clinton budget. We oppose this proposal because these increased costs would be passed on to rural ratepayers who are already burdened with increasingly high rates for service. Without the subsidized credit assistance provided by REA, even greater pressure would exist for rate increases to local subscribers. This subsidy cost of the insured program represents the only significant cost to the taxpayer of the entire REA telephone program other than program administrative costs. It is our firm belief that the value of this assistance to rural ratepayers far outweighs the cost to the taxpayer. While this issue technically is not before the appropriations committees it is an essential ingredient to the success of the program and warrants discussion here.

Conclusion

The President exclaimed in his economic message to Congress, "We ought to be subsidizing the things that work"! We agree with that assessment. The REA telephone loan program does work and work effectively. It is in place today and it is doing the job Congress intended. It doesn't have to be re-invented or replaced with untried concepts or new proposals. The REA telephone program has a proud record and unlimited future potential for our country.

Thank you for the opportunity to present our association's views concerning this vital program.

STRAWBERRY RESEARCH

WITNESS

TIMOTHY M. NOURSE, NORTH AMERICAN STRAWBERRY GROWERS ASSOCIATION

Mr. DURBIN. Tim Nourse, with the North American Strawberry Growers Association.

Please proceed with your testimony.

Mr. NOURSE. Thank you for the opportunity to present testimony this afternoon in support of increased funding for strawberry research at the fruit laboratory at ARS in Beltsville, Maryland.

I'm Timothy Nourse, Chairman of the legislative committee of the North American Strawberry Growers Association. In addition, I'm a farmer. I farm in Whately, Massachusetts, producing strawberry and raspberry nursery stock.

In addition we do produce strawberries for the fresh market, but unfortunately we are out of season at this time of the year. [Laughter]

Our strawberry industry appreciates the past support from ARS Beltsville, the developments that have been vital in keeping our eastern, midwestern and southern growers competitive in strawberry growing.

As farm producers, we recognize your challenges of working with the budget constraints, but in view of the situation, our association feels that strawberry research effort at Beltsville is unique and it is the primary, and as it is the primary source of research development for strawberries.

In the next two minutes, I will outline the following: Why should Congress spend money on strawberry research? What justification do we have for asking for increased levels of funding? And do the results from strawberry research pay?

First item, the Beltsville program is the only full-time breeding program for eastern, midwestern, and strawberry growers.

All of the strawberry research efforts at the various state experiment stations have been dramatically reduced in recent years, and as strawberries are grown on a wide geographical area, this high value crop allows family farms in many states throughout the U.S. to produce good income opportunity with this crop.

In addition, strawberries are an excellent crop in the scheme of the sustainable agricultural effort. We already have integrated task management, IPM strategies in place that has documented pesticide reduction.

The results of the breeding program at Beltsville, the focus on breeding for disease resistance supports these principles of sustainable agriculture and IPM.

And finally, the results of these efforts benefit the public. Our pick-your-own fields reach out to thousands of customers as a source of recreation, quality fruit, and economical prices.

What justification do we have for asking for increased funding levels? Support of strawberry research at Beltsville has decreased 50 percent since 1988. In combination with inflation, it has further reduced the available dollars to the program.

An increase in support for strawberry research will build on and support the principles of sustainable agriculture.

The main focus of our association is to fund strawberry research. Money is collected from our members and help in providing support.

We don't have the resources to fund all of the work that is necessary, but the effort at the fruit lab in Beltsville provides a valuable infrastructure in the support of our industry.

Do the results from strawberry research pay? Past variety introduction has been critical to the success of our strawberry growers.

Breeding for disease resistance eliminates pesticides for the control of red steel disease and other soil fungi diseases.

Until recently, the Beltsville program was the only program in the world committed to breeding for disease resistance of soil fungi diseases.

From the viewpoint of strawberry growers, the program at Beltsville has been working and it has been a great success.

So in conclusion, Mr. Chairman, there is a desperate need not only for continued but increased support for strawberry research at Beltsville.

I request your support for increased funding for the fruit laboratory.

I thank you for your time and your consideration this afternoon.

Mr. DURBIN. Thanks, Mr. Nourse. I was invited to speak out at Beltsville earlier this week and had a chance to take a brief tour for the first time. I share your feelings about the important work that is being done there.

I think you have given us some good information here about the industry. I was surprised to learn that we are the world leader in strawberry production. Are strawberries native to the United States?

Mr. NOURSE. Yes. The basis for all the varieties come from the wild strains, Fergary, Virginiana, Chelents, they come out of the West coast mountains, and from those wild strawberries, they hybridized them to develop the strawberries that we have today.

Mr. DURBIN. As I understand it here, your association has a check-off or some other system of raising money from your members to support research, and the amount collected over the last ten years is $250,000.

Mr. NOURSE. Yes.

Mr. DURBIN. Is that, can you tell me is that a systematic approach that you use in collecting funds for this?

Mr. NOURSE. The organization was beginning to be organized for the purpose of funding strawberry research, so a large percentage of the dues is budgeted each year so that over the course of the last ten years, we budget between $25 and $30,000 a year as we call it, you know, grower support money to help kindle other projects.

So we have supported research projects at Beltsville, and Cornell, at Illinois and Michigan, and so the growers are saying we have this problem, here is a little bit of money. Other people put money with it so it's a means of getting important projects accomplished that are vital to the growers.

Mr. DURBIN. Thank you. Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman. Mr. Nourse, how many members do you have in your organization?

Mr. NOURSE. We have about 500 members.

Mr. SKEEN. 500 members.

Mr. NOURSE. Yes.

Mr. SKEEN. What is the total cash value of the crop produced domestically in the United States?

Mr. NOURSE. Yes. I know on the back page of the presentation, I believe it is around $500 million.

Mr. SKEEN. $500 million.

Mr. NOURSE. Yes, yes, and in our particular industry, of course, there is the California industry and the Florida industry, and then there is all the rest of us, and it's from this effort that the work at Beltsville results in varieties they work in North Carolina, they work in Illinois, they work in New England.

Mr. SKEEN. So they almost grow anywhere, in any climate.

Mr. NOURSE. Yes. A lot of them, some do better in the south or the north, and vice versa, but overall that material has been very adaptable to support of these growers.

Mr. SKEEN. So it is key to the progress of your industry.

Mr. NOURSE. Yes, it is.

Mr. SKEEN. Well, as a great strawberry fan, every morning, I've got to have my strawberries on my cereal. I want to tell you, I envy you working with these, except I never could get them to grow in the southwest very well. It's a tough place to grow strawberries.

Mr. NOURSE. That's true. That's true, sir.

Mr. SKEEN. Yet they are native to the mountains around there.

Mr. NOURSE. That's very true.

Mr. SKEEN. Thank you, sir.

Mr. NOURSE. Thank you.

Mr. DURBIN. Thank you, Mr. Nourse. I appreciate your testimony.

Mr. NOURSE. Thank you.

[The information follows:]

North American Strawberry Growers Association

April 5, 1993

Honorable Richard J. Durbin, Chairman
Subcommittee on Rural Development,
Agriculture and Related Agencies
Committee on Appropriations
House of Representatives
Rayburn Building, Room 2362
Washington, DC 20515-6015

Dear Mr. Durbin:

The enclosed written testimonies to your committee are provided by the Legislative Committee of the North American Strawberry Growers Association, Inc.

We continue to seek an increase in research funding for strawberry research at USDA Beltsville, Maryland. The Beltsville Station is the primary source of research to support strawberry growing in the Eastern U.S. Our request is of upmost importance for the continued success of Eastern Strawberry growing.

Our Association has made a strong commitment of over $250,000.00 to strawberry research projects. We tax our membership to support our research priorities. The strawberry research effort at USDA, Beltsville, provides a critical infrastructure for our industry. This support is essential for our eastern strawberry industry.

Our Legislative Committee is as follows:

Timothy Nourse (Chairman) - Nourse Farms Inc., Whately, MA 01373
Donald Patterson - Patterson Farms, Inc., Thornburg, VA 22565
Ben Fulton - Fulton Farms, Troy, Ohio 43235
Ronald Beinlich - Triple "B" Farms, Monoghela, PA 15063
Edwin Radewald - Radewald Farms, Niles, MI 49120

I am presently scheduled to present verbal testimony before the House Subcommittee on Rural Development, Agriculture and Related Agencies on April 21st at 4 p.m.

Thank you for considering this urgent request to support our commercial strawberry industry.

Sincerely yours,

Timothy M. Nourse
Chairman

STATEMENT REGARDING

FISCAL YEAR 1994 APPROPRIATIONS

Presented To

COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON

RURAL DEVELOPMENT, AGRICULTURE AND RELATED AGENCIES

by

NORTH AMERICAN STRAWBERRY GROWERS ASSOCIATION, INC.

Timothy M. Nourse, Chairman
NASGA Legislative Committee
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SUMMARY OF

PROBLEM AREAS IN STRAWBERRY PRODUCTION FOR WHICH URGENT RESEARCH NEEDS EXIST

The following requests are the Research priorities required by the industry for strawberry research. The strawberry industry acknowledges all the past advances provided to us by USDA, Beltsville. As we are familiar with the current programs at Beltsville and the research requirements for our industry, we perceive that the following increase to the Beltsville program is essential to maintain a strong Eastern U.S. Strawberry Industry. Realizing the difficult budget constraints, we have prioritized the funding in order of most importance beginning in 1994:

I CONTINUING USDA/ARS PROGRAM SUPPORT ($ 900,000)
- A. Cooperative Breeding Programs
- B. Plant Disease Research

II REDUCTION OF PESTICIDE USE (New Programs, $ 300,000)
- A. New Virology Position ($ 200,000)
- B. Anthracnose Research ($ 50,000)
- C. Insect Resistance ($ 50,000)

III BIOTECHNOLOGY and CROP GENETICS (New Programs, $ 250,000)
- A. New Molecular Geneticist Position ($ 200,000)
- B. Genetic Diversity and Variety Development ($ 50,000)

SECTION A

The North American Strawberry Growers Association (NASGA) recommends that $ 800,000 be added to the budget of the USDA Agricultural Research Service for strawberry research in the Small Fruit Crops Improvement Program. NASGA requests funding beginning with the 1994 fiscal year. NASGA supports this new funding over and above the current minimum level of approximately $ 649,100.

Current levels represent a decrease of $ 790,000 or 50% since 1988. Eastern U.S. Strawberry Growers urgently need the following:

URGENT NEEDS	FISCAL YEAR FUNDING LEVEL 1994	1995	1996 & cont
CONTINUING PROGRAM SUPPORT (USDA/ARS)	$ 900,000	$ 985,000	$1,100,000
REDUCTION OF PESTICIDE USE			
A. New Virology Position	$ 200,000	$ 200,000	$ 250,000
B. Anthracnose Research	$ 50,000	$ 50,000	$ 50,000
C. Insect Resistance	$ 50,000	$ 50,000	$ 75,000
BIOTECHNOLOGY and CROP GENETICS			
A. New Molecular Geneticist	$ 200,000	$ 200,000	$ 250,000
B. Genetic Diversity	$ 50,000	$ 50,000	$ 75,000
TOTALS	$ 1,500,000	$1,535,000	$1,800,000

JUSTIFICATION - The U.S. is the world leader in strawberry production with 20-25 percent of the total world market. Strawberries are a healthy and nutritious food. They contain high levels of vitamin C and fiber but are low in calories (55 calories per cup) and sodium. Recent research at the USDA/ARS Small Fruit Crops Improvement Program at Beltsville, MD found that the level of ellagic acid, an anticancer agent found in strawberries, may be increased through breeding.

Strawberry production supports sustainable agriculture. Currently strawberry growers use Integrated Pest Management (IPM) techniques that have reduced pesticide use by 40% or more. Our proposal for increased funding would support the continued reduction of pesticide use. This support is essential for the many family farms in the U.S. that produce strawberries.

Our members produce strawberries in 36 different states. Eastern U.S. Strawberry production (this area is east of the Rocky Mountains and north of Florida) is involved with 12,150 acres producing a value in excess of $60,000,000.00. Many consumers benefit with with our Eastern Strawberry Production by utilizing Pick Your Own. Hundreds of thousands of consumers take part in the activity.

Strawberries have unique problems associated with production, pest control and marketing. NASGA members tax themselves and have provided in excess of $250,000 over the last ten years, to support pertinent and timely research at the USDA/ARS in Beltsville and other experiment stations throughout the U.S. Unfortunately, funding at the Federal level has dropped dramatically in the last few years and NASGA is highly concerned about this pattern.

The strawberry industry looks to the USDA/ARS in Beltsville for leadership and it is urgent that their research support be increased. Please consider support for the following new programs that will pay dividends many times over.

CONTINUING PROGRAM SUPPORT - to maintain current programs and confront urgent research needs of the U.S. strawberry industry.

/

NASGA also recommends a modest increase in continuing program support. (USDA/ARS)

A. Cooperative Breeding Programs: A strong strawberry industry today is predicted on timely research support and breeding programs in the past. NASGA has encouraged and supported in part the award winning USDA/ARS research at Beltsville and other cooperating facilities. We must return to at least the 1988 funding levels. Scientists without technical help and equipment are hindered in achieving the high level of performance desired. The need for new varieties and cooperative evaluation of native and exotic germplasms are intrinsic components of the Small Fruit Crops Improvement Program of the USDA/ARS in Beltsville.

B. Plant Disease Research: The plant breeder cannot work in a vacuum. The plant pathologist tries to understand all aspects of disease development. This knowledge is essential in selecting genes that provide various levels of resistance in different environments. Disease prediction programs and Integrated Pest Management also require vast amounts of fundamental knowledge.

More than 100 different fungi and over 15 virus and virus-like pathogens infect strawberries. The plant pathologist must be able to distinguish these from the injury caused by more than 200 strawberry insects. The overall result can be the development of successful non-chemical pest control for the benefit of growers and consumers alike.

REDUCTION OF PESTICIDE USE - to reduce the use of pesticides through the development of new disease and insect resistant varieties and screening for and elimination of virus infections.

A. New Virology Position: Strawberries are prone to virus diseases some of which significantly reduce yields but show few other visible symptoms of infection. Most growers use certified nursery plants that are free of known viruses and they keep them from one to many years in the field. Because viruses may be transmitted to other plants by aphids or other insects, growers often need to apply insecticides to prevent the spread of infection.

Indexing techniques to detect viruses in plant tissue were developed in the 1950's. New techniques involving tissue culture and nucleic acid "probes" are already available to study and detect viruses in other crop plants.

Dr. Richard Converse, the principle strawberry virologist in the U.S., retired in Sept. 1990 and was not replaced; nor was Dr. John McGrew in Beltsville, MD who retired earlier. The importance of strawberry virus research cannot go unrecognized. For the USDA or any breeder to release a new variety, it must be confirmed that no viruses are present in the propagation material.

B. Anthracnose Research: "Anthracnose" is a complex of fungus diseases that damage strawberries in the Eastern United

States. Many southern nurseries have gone out of business due to this devastating disease.

The disease is spreading northward and threatens plant nurseries in the Northern U.S. also. Breeding programs for anthracnose already exist, but they are not adequate since the anthracnose pathogen has many types and these invade the strawberry plant at different sites.

Suitable genetic resistance for anthracnose is therefore much more difficult to find and additional pathological studies are needed to prevent the spread of the fungus into cooler northern areas.

C. Insect Resistance: For sustainable agriculture, it is essential that plants be resistant to insects. In the past, insecticides were readily available for the control of insects that damage strawberries. Therefore, our knowledge of genetic resources and their incorporation into resistant varieties is currently very limited. In addition, fewer pesticides are available and there is greater interest in reducing production costs and the environmental impact of any chemicals still available to us. Certain insects can be monitored and sprays may be eliminated, but insecticides still play an important role in strawberry production. Every effort should be made to develop insect resistant varieties that will strengthen IPM programs nationwide.

BIOTECHNOLOGY and CROP GENETICS - To improve varieties through the application of current molecular biotechnology and utilization of new genetic resources.

A. New Molecular Geneticist Position: Strawberry varieties need to be improved continuously in order to satisfy the needs of consumers as well as allowing growers to produce strawberries economically. The molecular geneticist has wonderful new tools to increase the rate of plant improvement. For example, pieces of genetic material carrying useful genes can be attached to gold particles and "shot" into hosts with a "gene gun". The molecular geneticist will develop an understanding of the total strawberry genome including nuclear, mitochondrial and cytoplasmic genes and determine ways to transfer them. The genes for pest resistance, reduced water or fertilizer use, increased photosynthetic ability and strawberry fruit size are major topics for investigation. This scientist would cooperate closely in the standard breeding and variety evaluation program.

B. Genetic Diversity and Variety Development: Vast sources of native and exotic strawberry germplasms have been collected from North and South America in the last few years. These plants need to be maintained, characterized as to type and incorporated in the USDA cooperative breeding program. In the U.S., there are over 134 varieties of strawberries, but only 17 parents are used as genetic sources.

This lack of genetic diversity is of great concern due to the potential for catastrophic pest outbreaks. In addition, it

is a limiting factor in finding other valuable genetic traits. The strawberry germplasm collections are a major resource for the molecular geneticist mentioned above.

SECTION B

Strawberries are grown commercially in 36 states; the top producers being: California, Oregon, Florida, Washington, New York, Michigan, North Carolina, Pennsylvania and Ohio...a dramatic shift in location since the 1940's.

The far west grows 76% of U.S. production on 43% of the acres; the mid-south grows 13% on 24% of the acres; and, the central and N.E. states combined produce 11% on 33% of the acres...85% is sold fresh, 15% is processed.

There are roughly 5000 commercial growers with 44,950 acres that produced 533 tons of strawberries in 1988, an increase in production of 98% since 1974. Gross returns exceeded $ 537 million in 1988, up 223% since 1974.

Eight out of ten households purchase fresh strawberries during the season and one out of seven households buys strawberries from local farms. Per capita consumption increased rapidly and is now more than 3.0 pounds per person. Consumers who freeze and make jams and jelly consume even more.

Over 70% of strawberries grown in the central and N.E. states are harvested by pick-your-own customers on farms. Between 7.6 and 10.0 million consumers patronize farms to buy home-grown strawberries.

Strawberry farms are among the most intensive and innovative in the U.S.. High levels of management and investment are required. In the central and N.E. states, an investment of $ 3,500 per acre is required to grow the crop until its first harvest. The per acre start-up values for Florida and California are at least $ 6,500 per acre. The extra cost is due to plastic mulch, soil fumigation, plant stocks and labor required for an annual cropping system. The average strawberry farm in Illinois is 4.8 acres per farm.

Strawberries are the number eight export crop of all U.S. produce, exceeded only by grapes and apples of the non-citrus fruits.

Although as many as 50 varieties are grown in the U.S., an estimated 90% of the commercial acreage is limited to nine of ten varieties. Most varieties are replaced by improved ones in less than 15 years.

Strawberries are the first aromatic taste of spring. One-half cup serving of strawberries contains the recommended daily allowance of Vitamin C. and more fiber than a slice of whole wheat bread. In addition, strawberries contain substantial amounts of Vitamin A and traces of thiamin, riboflavin, niacin, Vitamin E, calcium, phosphorus and ellagic acid (an anti-cancer agent).

Strawberries add flavor, food value and pleasure to meals and snacks. They ripen in short local seasons of about 30 days but are available during nearly every month of the year in supermarkets from California and Florida.

SHEEP INDUSTRY

WITNESS

JIM MAGAGNA, AMERICAN SHEEP INDUSTRY ASSOCIATION

Mr. DURBIN. Next we have Jim Magagna from the American Sheep Industry Association. Is that right, or close to right?

Mr. MAGAGNA. Definitely right.

Mr. DURBIN. How about that? Thank you for joining us today.

Mr. MAGAGNA. Thank you, Mr. Chairman. I'm Jim Magagna, a sheep rancher from Western Wyoming, and immediate past president of the American Sheep Industry Association.

I would like to summarize for you today some of those programs including our written testimony that are most critical and most directly impact the sheep industry.

The first of these is the Scrapie Flock Certification program. This is a new program just implemented in the past year USDA to provide a mechanism for certifying that flocks of sheep are free of the neurological disease Scrapie which poses a significant economic threat to the industry because just the concern over the disease causes an uneasiness in the marketplace, and has created already significant problems in the sale and removal of awful resulting from the slaughter of sheep.

The certification program is funded approximately 50 percent today by the industry itself, but it is the type of program that as it becomes more widespread and more operational, the level of federal funding needed will continually decrease, and our indications would indicate that certainly by the year 2000, federal involvement will be minuscule, perhaps approximately two percent.

The amount of $3.5 million that is in the current administration budget for fiscal year 1994 we believe is a meaningful amount to conduct this program, although slightly more than that would be needed before we fund it for that year.

That compares to the current $.8 million because the program is just beginning to take off, and widespread use is anticipated during the next two years of the program.

Perhaps the most critical program to the sheep industry today is animal damage control, particularly historically in the western states, but increasingly throughout all of the states that grow sheep in the United States, which incidentally are all 50 of our states.

Again, the administration's budget proposes a slight increase from the current $25.6 million to $26.3 million. Several reasons why an even larger increase is in fact needed in this program.

As the number of tools that are available for animal damage control of losses of livestock, particularly sheep, has continually decreased because of the social unacceptability of some of the tools we've used, the cost of conducting the program continues to increase.

Another cost factor just recently, the Bureau of Land Management has put a halt on all predator control activities on most of the Bureau's districts throughout the western United States pending the updating of environmental analyses.

This not only poses an immediate present hardship, but once again will be another factor causing the program to fall behind and increasing the cost of playing catch-up, and regaining adequate predator control on some of those lands once the program has been reinstated, and we are hopeful and confident that that will come soon.

In addition to the $26.2 million for operation of the program, under an agreement reached between USDA APHIS, ADC and the U.S. Forest Service last year, ADC has taken over the NEEPA responsibility for the animal damage control program on all forest service lands in the United States.

However, they received no funding or no transfer of funds to go with this added responsibility. This is clearly a new burden placed on this agency that requires additional funding, and we are supporting an appropriation of $4.8 million to ADC specifically to meet the costs of complying with NEEPA.

The third critical element of the animal damage control program is research. As I have stated earlier, we are continually losing tools that we have used in the past to control predators, particularly the coyote.

We have not had adequate research to come up with new tools to replace these, and particularly non-lethal methods that might be more socially acceptable, and yet meet the need and protect the economic interests of our industry.

So we feel that continued funding for research at least in the amount of the 1993 funding, and if possible, considerably more than that, is needed, so that we can move toward a position in five to ten years from now, that we will be less dependent even than we are today on lethal methods of control, and we will have some new tools, some less costly tools hopefully at our disposal.

The Foreign Agricultural Service Funding—we have been very active in the use of FAS funds for the past five to six years, particularly in international marketing of wool. It served several functions for our wool industry in this country.

First and foremost, of course, we have successfully opened up an international market for American wool, and whereas virtually no American wool was being exported on an ongoing basis five or six years ago, in 1992, approximately four and a half percent of the domestic wool clipped was exported.

Now that may not sound like a significant amount, but the significance of it is that we are never going to be, nor do we want to be tremendous exporters of wool because we are a wool deficit nation. We don't produce, well, less than half of the wool that is consumed in the United States.

But from a competitive economic standpoint, it's vital to our industry that we have that international competition in here bidding on our wool clipped in order to create a competitive market situation. As a number of domestic woolen mills has continually declined, we have lost competition. That's now being provided by the international buyers.

A third element of that program is that the opportunity to market in a global marketplace has provided the incentive for our producers to undertake a program of better preparation of their wool clips.

Traditionally the American clip was not put up to international market standards. In recent years we have made significant progress in getting our producers through some of our training programs, and because of the opportunity for export, to put wool up in a manner that makes it exportable an makes it competitive with the wools from the major wool producing countries such as Australia, Argentina, South Africa, throughout the world.

Another area that I would like to emphasize, and again, a fairly—not a new program but a revived program, I might say, is land market information and price discovery on lamb pricing, lamb pelt pricing in the United States.

Through close cooperation from USDA in the past two years, we have been able to re-establish a number of series of market reports and pricing information reports on lamb in the United States, types of reports that are enjoyed by some of the other major commodities, and particularly the other major red meat, animals in the United States but had been lost over the years by the lamb industry because of the decreasing size of our industry.

Again on the lamb side, as the number of competitors, Packers in this case, bidding for our products has dramatically decreased and become critically more important that the producer out there in the country have adequate knowledge and information about the market situation, about the supply of product available in order to make intelligent decisions about marketing with their product?

They can no longer often depend on four or five competitive bids to establish where the market is for their lamps when sale time comes. That may help on one or two bids and they have to be knowledgeable enough to know if that often single bid is, in fact, in light with the current market situation. The current added market information being provided by USDA as been extremely beneficial in turning around a very depressed market situation for lamb that has existed for three or four years, and it is critical that we maintain that ongoing level of reporting.

As you will see from our written testimony there are a number of areas in the research and education part of USDA programs that are important to our industry. We share most of those with a lot of other industries involved in agriculture, and I would leave those to our comments in our written testimony.

I appreciate again this opportunity to address the subcommittee, and would be happy to answer any questions you may have.

Mr. DURBIN. Mr. Magagna, what would be the impact of the President's proposal, eliminating the wool and mohair program, on your industry?

Mr. MAGAGNA. The President's proposal, and please allow me to correct that somewhat. As I understand, the administration proposal is not the elimination of the program, it's a cap on the amount that producers can receive under the program.

Mr. DURBIN. That's right.

Mr. MAGAGNA. But certainly there is legislation in Congress that would eliminate the program. Whether we are talking elimination or an excessively low cap, the impact would be dramatic because the sheep industry is such a small industry as I have stated earlier, less than 11 million head of stock sheep in the United States, only

about 6 million head of lambs being slaughtered annually, that we have slowly lost a lot of the infrastructure of the industry.

We feel we have reached the critical point now where if we lose any more producers or numbers of livestock of any size, that the packing houses, the processors of lamb, the woolen mills, just very basic things such as livestock haulers who have the equipment capable of hauling sheep, pharmaceuticals for the sheep industry and that, no longer become economically viable for those sub-industries that we are dependent on.

Particularly at this critical time, the current market for wool in the United States is perhaps as low as half of what it was last year. Last year was not a good wool marketing year. We have been in about a four year slump since the global crash caused by over-production of wool in primarily Australia.

Until that over-supply in Australia that is now in storage has been absorbed into the world marketplace, and we have reason to think it will take at least an additional three or four years to do that, our industry is quite frankly very dependent on the current wool incentive program.

It also provides the sole source of funding nearly for our promotion program whereby producers can in fact work to market wool and lamb, both domestically and internationally.

Mr. DURBIN. Thank you. Our resident expert on the subject, my colleague, Joe Skeen.

Mr. SKEEN. Jim, I think you did a fine job and I don't want to step on your act. I do want to get into the business of the woolen and mohair incentive program.

First of all, that doesn't cost the taxpayers of this country one thin dime. That money comes totally from tariffs outside of this country. A small producing base like we have in the United States, we are controlled by the world market set by the Australians, principally.

And so I think that the folks that import over two-thirds of the wool used in the domestic consumption market in the United States comes from those countries that control the worldwide market, and they pay the tariff.

The government doesn't pay one dime in administering the act either. They make, as a matter of fact, they make money from it because they hold 25 percent of those tariffs off the top and disburse the other 75 percent to the growers in the incentive program.

That program shows up on every hit list in the media and in Congress because people don't even understand the industry. They don't understand where the money comes from, and how it is disbursed.

And of course, wool was declared a strategic material in 1957. The initiation of the Wool Act, the Wool and Mohair Incentive Act, was to increase the production of wool and mohair in this country.

Well, now it has become the life ring for the industry. Without it, I don't think most of them could survive because the wool market is not effected by the American Production.

For instance, last year I think the wool market was bringing over a dollar something a pound. We just got through selling ours yesterday for 64-69¢ a pound.

Mr. MAGAGNA. You did well on this market.

Mr. SKEEN. We were on the top end of the market

Mr. MAGAGNA. Uh-huh.

Mr. SKEEN. But wool growers can't sustain those kinds of loses in a year's time.

This is not a well-understood industry. It is easy to pick on it politically. Mr. Chairman, the pork busters are wrong, and I don't want them to become sheep busters, so you made a good presentation.

But I just want it understood that this program doesn't cost the American taxpayer one dime. As a matter of fact, it is self-administered because of the 25 percent the Treasury retains to pay for the cost of running the program.

Thank you for your testimony and I am glad to see there is still another sheep herder left alive in the country.

Mr. MAGAGNA. Thank you for your fine comment. I would only add one comment to what you have said, Congressman Skeen, if I might, and that is that it is also one of the only programs that I am aware of that actually rewards the producer, not only for producing rather than for not producing, but for producing a better quality product.

Mr. SKEEN. Increasing the quality.

Mr. MAGAGNA. Of the amount you get out of the program.

Mr. SKEEN. You are absolutely right.

Mr. MAGAGNA. It's directly tied to the quality of the product you produced.

Mr. SKEEN. Thanks for the reminder. Thank you, Mr. Chairman.

Mr. DURBIN. Thank you. Mr. Pastor?

Mr. PASTOR. No questions.

Mr. DURBIN. Mr. Myers?

Mr. MYERS. Well, I am certainly not a sheep herder.

Mr. SKEEN. I listened to your farming talk.

Mr. MYERS. I agree with you about the pork busters, if that's what you want to call them. That's an insult to the pig industry, however, when you use that analogy, but nevertheless, during the years I've spent on this, there was a good many years on this committee that they had been wrong on a number of times.

I will say as a kid, my father bought and sold wool. Do they still have those great big bags?

Mr. MAGAGNA. We still put it in the great big round bags, although we are moving at lot more big square packs sort of like a bale of cotton now.

Mr. MYERS. But back then we had a big rack and I would be down in the wool bag and dad would drop the fleeces in, I would have to stamp them and get as much as we could in one of those bags before he would take it the mills.

Mr. MAGAGNA. I have been in a few of those myself.

Mr. MYERS. You come home smelling terrible. I just thought everybody smelled like that, but at school they told me something different. They didn't think that in school because I was the only kid that smelled that way. [Laughter.]

Anyway, thank you for your testimony.

Mr. DURBIN. Thank you, Mr. Myers, and thank you, Mr. Magagna.

Mr. MAGAGNA. Thank you.

[The prepared statement follows:]

STATEMENT of the

AMERICAN SHEEP INDUSTRY ASSOCIATION

for the

U.S. HOUSE of REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE for AGRICULTURE,

RURAL DEVELOPMENT, FDA, AND RELATED AGENCIES

APRIL 21, 1993

The American Sheep Industry Association (ASI) is a federation of state member associations representing over 100,000 sheep producers in the United States. There are numerous agencies and programs in the United States Department of Agriculture (USDA) which are important to the sheep industry, and we appreciate the opportunity to express our views on those portions of the USDA FY 1994 budget.

Scrapie

Adequate funding of the Voluntary Scrapie Flock Certification Program through USDA-APHIS is of critical importance to the sheep industry as well as all segments of the livestock industries. ASI appreciates this Subcommittee's efforts in recognizing the seriousness of this devastating disease and the real need for control and eradication.

The Scrapie Flock Certification Program initiated in October 2, 1992, is being widely accepted by producers in most states. However, it is dramatically under-funded. Sheep producers are now paying over 50% of the total cost of the program. If it is adequately funded in these crucial early years, federal funding should decrease to approximately 2% of the total program cost by the year 2000.

ASI strongly supports the Administration's budget amount of $3.5 million for FY 1994 for the USDA/APHIS Flock Certification Program. The industry's request for appropriations to fully fund the program is $4.8 million.

Animal Damage Control

The Animal Damage Control (ADC) program of USDA-APHIS is vital to the economic survival of the sheep industry. Our organization strongly supports the funding for ADC to at least the level recommended in the President's budget of $26.2 million for FY 1994.

Additionally, ASI urges the Subcommittee to appropriate a $4.8 million increase in ADC funding to meet the costs complying with the National Environmental Protection Act requirements. ADC has assumed the responsibility for NEPA compliance on ADC from the USDA Forest Service. NEPA compliance is a high priority in conducting federal animal damage control on private and public lands and ASI strongly supports adequate funding to meet the requirements. Non-compliance and subsequent loss of ADC is a tremendous cost to sheep producers in predator loss of sheep.

The ADC program is an important and necessary government service. The purposes of the program are to control wildlife and pest damage to agriculture, other wildlife, aquaculture, forest, range and other natural resources; to protect public health and safety through control of wildlife-borne disease; and to control wildlife at airports. Many sectors of agriculture, wildlife management and public health and safety rely heavily on the ADC program. These services are provided through a partnership between Federal, state and private interests.

Research in animal damage control is also important to the sheep industry. The long term ability to protect livestock depends on development of effective control methods to be accomplished through adequately funded research programs. We support funding for research in this area of at least the FY 1993 amount.

Foreign Agricultural Service (FAS)

The sheep industry participates in FAS programs such as the Market Promotion Program (MPP), GSM-102 and GSM-103 export credits and the Foreign Market Development Program. ASI strongly supports continued appropriations for these critical Foreign Agricultural Service programs at the FY 1993 level. ASI is the cooperator for American wool and has achieved remarkable success in increasing exports of domestic wool. American lamb sales also benefit from the Foreign Market Development Program though increased international efforts.

Lamb Market Information and Price Discovery Systems

The sheep industry strongly supports continued appropriations for USDA-Agricultural Marketing Service, and the National Agricultural Statistics Service to proceed with market information and price discovery systems for lamb at the FY 1993 levels.

Soil Conservation Service

ASI urges increased appropriations for the range programs of the Service to benefit the private range and pasture lands of the United States with conservation assistance.

RESEARCH AND EDUCATION

The sheep industry recognizes that it must be globally competitive, profitable and sustainable as a user of and contributor to our natural resource base; that production and processing practices must be environmentally sound, socially acceptable and contribute to the goals and overall well-being of families and communities. It is therefore essential that an integrated systems approach be used focusing on problem-oriented programs utilizing interdisciplinary team efforts. These efforts should be applied both to plan and to conduct research on complex problems as well as to apply problem-solving technologies on farms and ranches in educational programs.

Cooperative State Research Service (CSRS)

ASI supports the National Research Initiative (NRI) and requests appropriations of at least $130.195 million (the administration's combined funding request for the regular budget and for investment through the Economic Stimulus Package). We specifically request that the "Animal Systems" and the "Markets, Trade and Policy" sections receive a higher priority and thus a higher percentage of NRI funding. ASI also believes that the overall CSRS competitive grants should be strengthened and we support the administration of the NRI funds through the CSRS competitive grants system.

ASI supports funding of the Animal Health and Disease Programs and we urge the committee to restore this funding to at least the FY 93 level of $5.551 million.

As noted earlier, maintenance and enhancement of environmental quality is a high priority of the public as well as of the livestock industry and the sheep industry in particular. The vast majority of the western public rangelands are arid ecosystems. They are also the primary generator of the region's most precious natural resource--water. The scientific literature generally indicates that sheep grazing on watershed and riparian areas are not detrimental and, in fact, may be beneficial; however, long term properly designed studies have not been done. Economical systems of grazing national rangelands are essential to the viability of the sheep industry since approximately 37% of the nation's sheep are grazed on these lands. As the public deliberates on legal issues regarding water quality, multiple use and biodiversity of public rangelands, it is essential that everyone enter these discussions with the best scientific information possible.

ASI requests that $500,000 be appropriated through a CSRS targeted special grant for a six-year study to measure and document the effects of sheep and cattle grazing on riparian and water shed areas. We propose that the project be a collaborative effort between CSRS through Montana State University and ARS through the U.S. Sheep Experiment Station at Dubois, Idaho. The study would be conducted on 17 sections of ARS managed U.S. Sheep Experiment Station summer rangelands located in the Centennial Mountains in Beaverhead County, Montana, along Odell and Tom's Creeks. ASI will pledge $200,000 of producer funded support and ARS has pledged $300,000 of redirected funds toward the project for a total project cost of $1 million.

The on-going research in Wool is critically important to the sheep industry. ASI supports continued funding of $250,000 for FY 1994 through the special grants program of the CSRS.

Agriculture Research Service (ARS)

There continues to be a wide disparity between plant and animal science funded research in ARS. We encourage the committee to correct this inequity by adding new initiatives to the Animal Science research program.

ASI recommends continued support of the Scrapie/BSE research initiatives at Pullman, Washington and Ames, Iowa.

ASI recognizes the need for a large animal necropsy and incinerator facility at the National Animal Disease Center in Ames, Iowa and we urge the committee to appropriate $3.9 million to build the unit.

Extension Service (ES)

In being consistent with "FAIR-95" priorities and the sheep industry's stated belief that for the livestock industry to be globally competitive and sustainable, we must implement educational programs that employ an interdisciplinary, integrated systems approach to problem solving through Integrated Resource Management (IRM) as is outlined in Chapter 2 - IMS. ASI urges funding of Integrated Management System (IMS) program as outlined in the 1990 Farm Bill Subtitle B; Sustainable Agriculture Research and Education; Chapter 2 - Integrated Management Systems, Section 1627 at the level of $3 million, as is proposed in the administration's budget.

ASI also supports funding Chapter 3, Sustainable Agriculture Technology Development and Transfer Program title XVI, Subtitle B, contingent on the funding for Chapter 2.

AGRICULTURE AND RURAL DEVELOPMENT PROGRAMS

WITNESS

HON. BILL RICHARDSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO

Mr. DURBIN. From the State of New Mexico, the Honorable William Richardson.

Mr. RICHARDSON. Thank you, Mr. Chairman for allowing me to testify and I want to thank my colleague, Mr. Skeen, for his help with these two bills today. It was a bipartisan effort.

And of course, it is nice to see Mr. Myers. Mr. Chairman, I will be very brief. I have a very modest request for about $4 million.

Mr. DURBIN. Excuse me. [Laughter.]

Sorry.

Mr. RICHARDSON. Mr. Chairman, as you may know, I inherited part of Congressman Skeen's congressional district.

Mr. DURBIN. It needed a lot of work, didn't it? [Laughter.]

Raise the intellectual level of both districts; go ahead.

Mr. RICHARDSON. So, Mr. Chairman, what I am requesting is a milk waste water treatment project to create a managed wetland in a town called Portales, New Mexico, funds for a storm water management project in that same area, and $300,000 for an agricultural outreach program for specialized training in Clovis and Tucumcari, New Mexico.

Also I would suggest $200,000 for a rural research and development program in Clovis and Tucumcari, New Mexico, and funds for the New Mexico cooperative extension service to assist low income families with young children to improve their diet through educational activities.

Mr. Chairman, I think these requests are modest and I would also hope that you support Congressman Skeen's requests for New Mexico State University which is in his congressional district, as I did not mention these requests.

Mr. Chairman, I'm delighted with the new leadership in this subcommittee and I would be pleased to answer any questions.

Mr. DURBIN. Thank you very much, Mr. Richardson. Have any of these projects been funded through other committees or in previous Congresses? For instance, the managed wetland project.

Mr. RICHARDSON. Mr. Chairman, no they have not.

Mr. DURBIN. The storm water management project, what kind of local and State funding goes into that project?

Mr. RICHARDSON. At this time, no State or local funds have been committed to this project.

Mr. DURBIN. Okay, alright. Thank you. Mr. Myers?

Mr. MYERS. No questions.

Mr. DURBIN. Mr. Pastor?

Mr. PASTOR. No questions.

Mr. DURBIN. Thank you for joining us, Mr. Richardson. I appreciate that.

Mr. RICHARDSON. Thank you.

[The prepared statement follows:]

CONGRESSMAN BILL RICHARDSON
TESTIMONY
SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES
HOUSE COMMITTEE ON APPROPRIATIONS
APRIL 21, 1993

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to testify today on several projects of importance to my Congressional district in New Mexico.

MANAGED WETLAND PROJECT

A milk processing plant in Portales, New Mexico will be in operation by the end of the calendar year. This plant will produce a supply of distilled water, as a byproduct of the condensation process. The Portales Board of Economic Development is interested in using this discharged water to create a managed wetland. By providing a natural habitat for wildlife and native vegetation and waterfowl, the creation of a managed wetland would enhance research at Eastern New Mexico University, as well as stimulate economic development in the Portales area.

Over one hundred acres of low-lying land would be donated by the Board of Directors for the creation of this wetland. Funding would be required to construct a pump and related hardward to pump the wastewater to the site. Additional funds would be needed to build a dike to protect the railroad which borders the wetland site.

I respectfully request $750,000 for a milk wastewater treatment project to create a managed wetland in Portales, New Mexico.

STORM WATER MANAGEMENT PROJECT

The City of Portales has developed plans for a storm water management

project which would involve the construction of holding ponds to collect and slow storm water entering the city. The natural flow of stormwater in Portales, New Mexico is from northwest to southeast. Approximately 13,000 acres of farm and pastureland lie northwest of Portales. Stormwater from this land flows southeast through the city.

Portales is relatively flat and its streets are the only means of handling stormwater. The city's flat terrain greatly reduces the rate at which stormwater flows through the city, thus overflowing and rising above the street and curb level at a faster rate than city streets can drain stormwater from the city.

I respectfully request $2.8 million for a storm water management project for Portales, New Mexico.

AGRICULTURAL OUTREACH PROGRAM

Agricultural leaders in Eastern New Mexico have identified the need for an agricultural outreach program for Quay and Curry counties. The Small Business Development Center at Clovis Community College would administer the program as part of the New Mexico Small Business Development Center Network in Curry County and coordinate a similar effort in Quay County with the Small Business Development Center at the Tucumcari Area Vocational School.

In both counties, an advisor would travel to on-site locations and provide specialized training to those in the agricultural sector. Advisors would identify general training needs and arrange for consultants to conduct training seminars. Issues addressed in short training sessions would include such topics as job safety, livestock maintenance, and crop farming techniques, among others.

I respectfully request $337,000 for a agricultural outreach program for

specialized training in Curry and Quay counties.

RURAL RESEARCH AND DEVELOPMENT PROJECT

The agricultural community has identified the need for a program to address problems related to transportation infrastructure for rural agriculture and related industries. The Small Business Development Center at Clovis Community College would administer the program as part of the New Mexico Small Business Development Center Network in coordination with the Small Business Development Center at Tucumcari Area Vocational School.

In both counties, a rural development specialist would work with existing rural city and county organizations to develop strategies to overcome obstacles relating to transportation infrastructure that hinder existing rural businesses from competing fairly and potential businesses from relocating to the area. This specialist would identify cooperative grant programs and write grant proposals for infrastructure enhancement. Issues would include, improving rural county roads and attracting air services, among other transportation issues relevant to rural development.

I respectfully request $244,000 for a rural research and development project in Curry and Quay counties.

NEW MEXICO COOPERATIVE EXTENSION SERVICE EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM (EFNEP)

As you know, the Expanded Food and Nutrition Education Program (EFNEP) of the New Mexico Cooperative Extension Service assists low-income families with young children to improve their diet through educational activities. Adult and youth program focuses on nutrition education, food selection, food preparation, and food

storage. Additionally, this program assists low-income families with resource management, budgeting, sanitation, and food stamp management. In New Mexico, EFNEP was piloted in 1968 in five counties and by 1970 was offered in 21 counties. Despite the widespread need for EFNEP throughout New Mexico, lack of funding has caused this program to be reduced to a four county area since 1990.

I respectfully request $506,000 for the New Mexico Cooperative Extension Service Expanded Food and Nutrition Education Program.

WIC PROGRAM

WITNESS

ROBERT GREENSTEIN, EXECUTIVE DIRECTOR, CENTER ON BUDGET AND POLICY PRIORITIES

Mr. DURBIN. Mr. Robert Greenstein from the Center on Budget and Policy Priorities. Welcome.

Your statement will be included in its entirety and if you would like to highlight it, we would appreciate it.

Mr. GREENSTEIN. Thank you, Mr. Chairman. I appreciate the opportunity to be here. I would like to focus my remarks today on the WIC program, and before beginning, just to commend this subcommittee for its leadership over the years in helping to make the WIC program what it is today.

As you know, the WIC program stands out in two ways—extensive research is found to be on the most effective, if not the most effective of all federal, social programs, and it also has unusually effective cost containment mechanisms.

Last year a number of Members of Congress asked the GAO to provide figures on the cost effectiveness of various children's programs. The GAO found there was really just one program where the hard data existed, and that was the WIC program, and the GAO reported that it decreases low birth weight by 25 percent, and very low birthrate by 44 percent.

The GAO finding on the reduction in very low birth weight is particularly significant because as the GAO noted, nearly 40 percent of all very low birth weight infants die within their first year.

The research on WIC has found not only quite dramatic impacts on pregnancy outcomes, but also strong impacts on other participant groups, including reduction in childhood anemia, improvement in digit memory scores for children who received WIC after their first birthday, improvements in the diets of children. The children in WIC are better immunized and more likely to have a regular source of health care, and that women who receive WIC after giving birth, are more likely to have higher hemoglobin levels and less likely to give birth to low birth weight babies in their subsequent birth.

On the cost containment front, the program is now generating $800 million a year in savings from infant formula cost containment. One of every five women, infants and children in the program are served as a result of those savings. I don't know of any other health related program that is achieving cost containment savings of this magnitude.

In the years ahead, I think there are two key types of issues for the program—how can it reach more of those in need but still be outside the program, and how can it be strengthened and approved so it's more effective?

In the first area, as you know, there is still a substantial unmet need. In January, CBO completed research and estimated 9.6 million are now eligible for WIC, and 5.7 million, 60 percent of the eligible are served. The CBO data show that about 90 percent of the eligible infants are now in the program, but only about 55 percent

of the eligible pregnant women, and about 50 percent of the eligible children.

Now, CBO also estimated the costs of fully funding the program and this doesn't mean a hundred percent of the eligibles are served. That doesn't happen in any program. CBO estimated, for example, that if funds were available to serve all eligible individuals who applied, about 90 percent of the eligible children and 80 percent, 90 percent of the eligible infants—I have a typo here in my testimony—and 80 percent of the eligible children would participate.

So the program really now pretty much is at full funding for infants but well short of that goal for both pregnant women and children.

Some women don't learn about WIC until they are in the hospital giving birth, at which point there are infants that are enrolled, but the women were not in during pregnancy. But many other pregnant women are reached by the program only after they have been pregnant for several months, but the research shows the most profound effects on birth weight and pregnancy outcomes come when pregnant women enroll before the end of the first trimester.

Some state and local agencies have been reluctant to conduct more vigorous outreach efforts though, for fear that they would be swamped by more WIC applicants then they have funding to serve.

This set of issues I think would be addressed, those who were left out of the program, would be addressed under the Clinton administration budget. President Clinton has set a goal for the WIC program to reach full funding by the end of 1996, and the funding levels in his budget are based on the CBO study and the CBO estimates.

That is to say putting it at a level where all those eligible who would apply are served not at a level reaching a hundred percent of the eligible which would never happen.

So I would strongly urge the subcommittee to honor the President's request for WIC and his goal for fully funding the program by the end of 1996 by providing the amount he has requested for the coming fiscal year.

Funding for WIC would be an historic achievement. But achieving full funding is not sufficient. The program also needs improvement in several areas. One immediate issue is that the formula which now allocates WIC money among the states is in need of improvement and there is an urgent issue here.

The Department plans to reallocate some WIC funds July 1st, but even though the greatest need in the country is in California where few children can be served past their second birthday, under the current formula the state can't receive a dollar of the funds that would be reallocated.

The language accompanying the stimulus package would address this problem and I guess my request is that even if there is no money left for WIC in the stimulus package—this could occur—if there is a way to continue to include that language which the Department has requested so that the Department can distribute funds where they are most needed this summer.

This is an issue, as I understand, that effects Arizona to a significant degree as well.

A second and particular critical issue is that WIC needs to reach pregnant women earlier in pregnancy. The average pregnant participant now joins the program sometime during the fourth month of her pregnancy.

As far as I know, not much work has been done to study variations in how state or local agencies perform in this matter, to identify models and best practices for assuring earlier entry into the program, and provide materials and assistance to help other agencies replicate the best practices.

I would suggest consideration be given to asking USDA to undertake such work.

As you often point out, Mr. Chairman, not enough is known about which approach to reducing smoking by pregnant, working participants. A valuation of the most effective strategies and dissemination of the results so they can be replicated would be useful.

Another issue is how WIC can best promote breast feeding, and in particular, I would hope that the Department would review the adequacy of the current statutory provisions on breast feeding before next year's WIC reauthorization.

I would note that the more WIC women who breast feed, the lower the costs of the program. It's a cost saving measure.

And lastly, progress needs to be made in improving coordination between WIC and the community and migrant health centers programs. The health centers are particularly important as health care providers in low income rural areas, but only about half of the community in migrant health centers function as WIC providers, and the others, they cannot and do not certify women, infants and children for WIC, or dispense WIC vouchers.

The community, when community health centers do serve WIC providers, women and children who come to get their WIC benefits, get prenatal care on an earlier, more timely basis, and those who are already coming to the centers don't fall through the cracks and get into WIC earlier in pregnancy.

Having community health centers serve as WIC providers is particularly important in rural areas that lack public transportation in which having to go to two different parts of the county for WIC and for health care can be a barrier.

So there I would suggest that USDA and HHS be asked to undertake a joint initiative to improve coordination between these programs, and to secure the participation of a greater number of community health centers as WIC providers.

That concludes my testimony. Thank you again.

Mr. DURBIN. Thank you very much, Mr. Greenstein. We have met and discussed this at length. I would like to meet some more to discuss the President's and our shared ambitious goal of full funding of the WIC program and questions about improving the quality of service provided in the program.

I think you have several areas that you brought to the attention of the subcommittee and they will be taken into consideration when we do the mark-up of the appropriation.

The staff just shared with me an interesting report about the impact of smoking, during pregnancy, on folic acid levels among pregnant women.

We know how important that is to avoid some birth anomalies such as neural tube defect, and that a smoking pregnant mother unfortunately is diminishing folic acid in her system to a precariously low point.

So we have a lot to learn, but a lot more to do and WIC, I think, provides a good opportunity for us to try to give some mothers and their children the best start in life.

I thank you for your work, and Ellen Neusenbaum's as well, over the years in serving as the leading advocates for this program in Washington.

Mr. GREENSTEIN. We thank you for your leadership over the years on the program as well.

Mr. DURBIN. I am happy to do it.

Mr. Myers.

Mr. MYERS. I think we certainly all agree, Mr. Greenstein, that as a goal we want to see these children properly provided for, especially babies born to mothers who use drugs and cigarettes and alcohol, all the things that we know are harmful to the unborn child. The newborn child often suffers from the effects of those, but I read the other day where there was going to be a surplus this year in the WIC account that wasn't being used.

How is more money going to get more money where it is really needed. If mothers are not coming now, how is more money going to get them to come to use the funds. They are not using all the funds now.

Mr. GREENSTEIN. I think there has been some misunderstanding on that. I don't know if you are referring to the report about unobligated balances, but that was a report covering many programs on an unobligated balance as of December 31st. That was after only one quarter of the fiscal year and in the WIC program in particular, states often don't get their final allocations for the year, notification of those until January.

But on a broader front, I think there is a key issue to understand here. In many of the education programs, they are forward funded. The money provided for fiscal 1994 is actually spent in 1995.

In the WIC program, the WIC program is the only major program in the federal government I am aware of that provides a benefit on a monthly basis to eligible households but it is funded as a discretionary program, not as an entitlement.

That poses some issues for—and I am not recommending it become an entitlement—but that poses some issues for states that administer the program. They must stay within that fixed allocation of money.

Now, not every WIC participant uses every WIC voucher each month. For example, the voucher says you can buy a certain number of boxes of cereal. Not everybody likes that much cereal, not a hundred percent of the cereal vouchers are transacted.

When you take the voucher to the store, the retailer fills in the retail price on the day you are purchasing the product, so if you are a state administrator, you do not know in advance exactly what percentage of the WIC vouchers will be transacted, and at exactly what price.

You learn that for any given month about 90 days after the month is over when the vouchers clear your accounting system. So

you really have to plan if you are a responsible, prudent state administrator, you have to plan so that you don't go over the top and put your governor in the hole.

And largely for that reason, in any given year, the WIC program spends about 97 percent of the funds appropriated and the other three percent are carried over to the following year.

That doesn't mean there isn't an unmet need. It's just the way the program structure works.

Mr. MYERS. Of course, that's true of most programs.

Mr. GREENSTEIN. No one can hit it right at a hundred percent.

Mr. MYERS. Most of them spend 103 percent.

Mr. GREENSTEIN. Well, the WIC program doesn't. There is always about three percent of the money that is then reallocated the following year, and the money that is being reallocated on July 1st is essentially some of that three percent from last year that they just got when they did the final close-out of the books.

That phenomenon has been true from the days when the program only served five percent of the eligibles. It is not an indication that we can't reach more people.

Mr. MYERS. I certainly concur as far as the use of any funds to help eliminate, birth defects whether it be related to smoking or drugs or alcohol. I suppose we have all had this experience—pregnant women coming into my office and I am old enough to be their grandfather, so I talk to them, why are you smoking, you are pregnant? Oh, my mother smoked and it didn't hurt me any and I will be damned if I am not going to smoke too. I enjoy it and I am not going to quit.

How is WIC going to change that any? The attitude of so many people who say well, I have always smoked and I am going to continue to smoke. I can't give it up. So how can WIC do that, as desirable as it would be?

Mr. GREENSTEIN. Well, I think what it attempts to do is to take advantage of the fact that when people are pregnant, it is not just their own health that may be at stake, but that of the unborn child that they are carrying.

And the WIC programs vary on this regard. Some of them don't do much different than the very general admonitions of why you shouldn't smoke. There are others like one of the major programs in Los Angeles that identifies the pregnant women that smoke, puts them into a separate track in WIC, and has them come back in for repeated counseling and so forth.

Now, I don't know if there has actually been a detailed evaluation of the impact. I know the people who run the program out there believe that they get results by the screening and intensive scrutiny and separate tracking of those pregnant women that work.

What I am really suggesting is not that I know the answer, but that the Department ought to go out and study these different approaches and collect data and if they can identify approaches in the WIC program that are successful, we all should know about that and they should be replicated.

Mr. MYERS. Okay, thank you for your testimony.

Mr. DURBIN. Mr. Pastor?

Mr. PASTOR. Thank you, Mr. Chairman. Having had experience with WIC programs at the local level, running a county hospital, I can tell you that it works. In the long run you are saving money by making sure that many of the women are in the program.

And I also will concur with you that we found that where you have the WIC program as part of the primary care center, that you tend to catch pregnant women at an earlier stage and you can follow through with the children.

I see that we are lacking in falling between the cracks in that area in my cases so I think one of our goals ought to be to, where we can, where we have extensive primary care centers, ensure that we also have the WIC program there.

It is a great program and you have a great supporter here.

Thank you, Mr. Chairman.

Mr. DURBIN. Thank you, Mr. Pastor. Mr. Greenstein, thank you for joining us.

Mr. GREENSTEIN. Thank you, Mr. Chairman.

[The information follows:]

Testimony of Robert Greenstein
before the
Agriculture, Rural Development, Food and Drug Administration,
and Related Agencies
of the House Committee on Appropriations
April 21, 1993

I am Robert Greenstein, executive director of the Center on Budget and Policy Priorities. The Center has had a longstanding interest in federal and state efforts to reduce poverty, and particularly in the federal food assistance programs. I also served in the late 1970s as Administrator of USDA's Food and Nutrition Service. I would like to focus my remarks today on the WIC program.

WIC's Unique Characteristics

The WIC program stands out in two ways. Extensive research and evaluation has found it to be one of the most effective — if not the most effective — federal social program. It also has unusually effective cost containment mechanisms, which stretch taxpayers' dollars further and make the program more efficient.

Research Findings on WIC

A few years ago, several Members of Congress asked the GAO to examine the research on a number of children's programs and analyze the cost-effectiveness of these programs. In a report issued in April 1992, the GAO reported that insufficient research data exist to assess the cost-effectiveness of most such programs. There was one major exception to this finding, the GAO found — the WIC program.

Based on the results of 17 studies of WIC, the GAO concluded that WIC has a profound impact on pregnancy outcomes. It decreases the risk of low birthweight by 25 percent. It decreases *very* low birthweight by 44 percent.

Because WIC reduces the prevalence of low birthweight, it also reduces medical expenditures. The GAO found that the savings are substantial.

- The GAO estimated that each dollar invested in prenatal WIC benefits saves $2.89 in Medicaid, SSI, special education, and other health care costs within the first year of birth — and $3.50 over 18 years.

- The GAO estimated that the $296 million the federal government spent for prenatal WIC benefits in 1990 averted $853 million in health-related expenditures during the first year of life for infants born to WIC mothers — and $1.036 billion over 18 years.

These findings are consistent with those of a detailed study conducted under contract to USDA and released in 1991. The study found that each dollar spent on the prenatal component of WIC saves between $1.92 and $4.21 in Medicaid costs just in the first few months after birth.

WIC evidently saves lives as well as money. The National WIC Evaluation, a highly regarded, multi-year examination of WIC that was issued in 1986, found that WIC reduces late fetal deaths. Moreover, in reporting that WIC reduced the incidence of very low birthweight by 44 percent among infants born to WIC mothers, the GAO noted that nearly 40 percent of very low birthweight infants die within their first year.

While WIC's impacts on pregnancy outcomes are particularly dramatic, the program has strong impacts on other participant groups as well.

- In an article published in the *Journal of the American Medical Association* in 1987, researchers from the Centers for Disease Control reported a two-thirds reduction in childhood anemia between 1975 and 1985 and found that WIC was likely to be a key factor behind this sharp improvement. The researchers also found that low-income children not enrolled in WIC had a significantly higher prevalence of anemia than those who were enrolled. The article was accompanied by an editorial in the *Journal* urging increased funding for WIC.

- The National WIC Evaluation found that children who participated in WIC after their first birthday had better digit memory scores, when tested several years later, than children who did not participate in WIC.

- The National WIC Evaluation also found that WIC improved the diets of preschool children by increasing average consumption of iron, vitamin C, vitamin B6, thiamine, and niacin and significantly decreasing the frequency of low intake of iron, vitamins A and B6, and riboflavin. The greatest dietary benefits were found among those groups of children who were at highest risk — those who were poor, black, lived in female-headed families or large families, or were short for their age.

- The study also found evidence that WIC serves as a gateway to health care. Children in WIC were better immunized and more likely to have a regular source of medical care than comparable children not in the program.

- Finally, a study at the University of California School of Public Health found that women who participated in WIC for an extended time

during the postpartum period had higher average hemoglobin levels at the onset of their next pregnancy. The infants to which they subsequently gave birth had higher average birthweights — and were at lower risk of being born with a low birthweight — than infants of comparable women who did not participate in WIC for an extended period of time during the postpartum period.

Cost Containment

As noted, WIC has achieved outstanding results on the cost containment front. In 1987, WIC cost containment measures in the infant formula area were virtually non-existent. Today, every state has a WIC cost containment system, and this year, these systems are generating $800 million in savings. In other words, infant formula manufacturers are paying rebates to the WIC program of nearly $800 million, all of which is then used to provide WIC to more of those eligible for it.

These cost containment systems are stretching WIC dollars further and getting more "bang for each WIC buck" appropriated. One of every five women, infants, and children on WIC today is served as a result of these cost containment savings. Few other programs achieve cost containment savings of this dimension.

President Clinton has set a goal of "full funding" for WIC. Without cost containment, that goal would be much more expensive to attain than it now is.

WIC Issues In The Years Ahead

WIC faces two key issues in the years ahead — how it can reach those who are in need but still remain outside the program and how it can become still more efficient and effective. Which aspects of WIC might be strengthened and improved?

Unmet Needs for WIC

There is still a substantial unmet need for WIC. In January 1993, the Congressional Budget Office completed research on the number of women, infants, and children eligible for WIC. CBO estimated that 9.6 million are eligible. Currently, 5.7 million — or about 60 percent of the eligibles — are served.

The participation rate is highest among infants; based on the CBO data, about 90 percent of those eligible now participate. Among pregnant women, 55 percent of those eligible participate. About half of the eligible children participate.

The CBO study also estimated the costs of "fully funding" WIC. Fully funding the program does not mean achieving participation by 100 percent of those eligible;

that does not occur in any program. CBO estimated, for example, that if funds were available to serve all eligible individuals who applied, about 90 percent of eligible children and 80 percent of eligible children would participate.

The program is thus close to "full funding" for infants. But it falls well short of this goal for both pregnant women and children. Some women do not learn about WIC until they are in the hospital giving birth. In such cases, their newborn infants are enrolled, but the women did not themselves participate during pregnancy. That, of course, reduces the program's impact. Many other pregnant women are reached by the program only after they have been pregnant for several months. As the GAO reported several years ago, WIC has its most profound effects on pregnancy outcomes when pregnant women enroll in the program before the end of the first trimester.

Some state and local WIC agencies have been reluctant to conduct vigorous "outreach" efforts to reach those who are unserved for fear that they would be flooded by more WIC applicants than they have funding to serve.

The CEOs' Full Funding Goal

In March 1991, the CEOs of five large American corporations — including AT&T, Honeywell, Prudential, and BellSouth — appeared before the House Budget Committee to call for full funding of WIC. The CEOs called WIC the equivalent of a triple A-rated investment. They called on Congress and the White House to fully fund WIC in five years, by 1996.

President Clinton has now essentially set the same goal. He has called for the program to reach full funding by the end of 1996, and in his budget, he has proposed raising WIC funding in increments so that the program attains this goal.

The funding levels in the Clinton budget are based on the CBO study and CBO's estimates of the costs of fully funding WIC. The Clinton budget levels for WIC do not reflect what the program costs if 100 percent of those eligible applied, as that would be an unrealistic assumption.

I strongly urge the Subcommittee to honor the President's funding request for WIC — and his goal of fully funding the program by the end of 1996 — by providing the $3.287 billion he has requested for fiscal year 1994. Achieving full funding for WIC would be a noble — and historic — achievement. It would represent excellent public policy.

WIC Program Also needs Improvement

Simply "fully funding" WIC is not sufficient, however. In several key areas, the program needs to be improved.

The most immediate need is to remedy a serious problem in USDA's formula for allocating WIC funds among states. Some of the states with the greatest unmet needs for WIC — such as California, where unemployment and poverty are now at unusually high levels — are barred from receiving any more WIC money this year under the current formula. There may be WIC funds in the stimulus package (if such a package survives); in addition, USDA plans to reallocate some WIC funds on July 1. But despite the fact that California's WIC program is so constrained it can serve few children past their second birthday, the state will be prevented from receiving any further WIC funds this year by the current formula. Language accompanying the stimulus package, particularly the Senate version of the package, would address this problem.

A second, and particularly critical, issue for WIC is to reach pregnant women earlier in pregnancy. Currently, the average pregnant WIC participant joins the program sometime during the fourth month of her pregnancy. Some begin to participate earlier, but others enter the program even later.

To the best of my knowledge, little work has been done to study variations in how state or local WIC agencies perform on this matter, to identify models and "best practices" for assuring earlier entry into the program, and to provide materials and assistance to help other WIC agencies replicate the exemplary practices. I would suggest that serious consideration be given to asking USDA to consider such an undertaking.

Similarly, not enough is known about which approaches to reducing smoking by pregnant WIC participants are most effective. Smoking increases the incidence of low birthweight, one of the conditions WIC is designed to combat. The extent of local WIC agency efforts to reduce smoking among WIC participants varies considerably. Here, also, evaluation of the most effective strategies and techniques, and dissemination of information on how to replicate them, could be useful.

Another issue is how WIC can be more effective in promoting breastfeeding. While significant strides have been made to enhance breastfeeding education and promotion efforts in WIC in recent years, further improvement is needed. One question that should be examined is whether the portion of WIC administrative funds earmarked for breastfeeding promotion activities is sufficient. This amount is now declining each year as a proportion of overall WIC resources. USDA could be asked to review the adequacy of the current statutory provisions on breastfeeding in time

for next year's WIC reauthorization. Achievement of the Surgeon General's goals for breastfeeding rates can be aided by increased emphasis on breastfeeding by local WIC programs. Furthermore, increased use of breastfeeding not only provides health benefits but also reduces WIC food costs.

In addition, progress needs to be made in improving coordination between WIC and community and migrant health centers, which play a particularly important role as health care providers in low-income rural areas. Only about half of the community and migrant health centers function as WIC providers; the other half do not and cannot certify women, infants, and children for WIC or dispense WIC vouchers.

When community health centers function as WIC providers, two purposes are served. As many studies have shown, the WIC program increases timely use of prenatal and pediatric care. Participants drawn into the WIC program to receive WIC benefits can then be connected with health care services. Thus, when community health centers serve as WIC providers, women and children drawn to the centers to receive WIC benefits can be provided with needed health care services — such as prenatal care — on a more timely basis. Similarly, when community health centers function as WIC providers, those receiving health care at these centers are less likely to "fall through the cracks" and to fail to receive WIC benefits early in their pregnancies. Having community health centers serve as WIC providers can be particularly important in rural areas that lack public transportation and in which a requirement to travel to different parts of a county to go to a community health center and a WIC clinic can be a barrier to participation.

For a variety of bureaucratic and other reasons, many community centers remain outside the WIC program. Some centers haven't applied to be WIC providers. In other areas, the state health department administering the WIC program prefers to deal primarily with county health departments.

I would suggest that USDA and HHS be asked to undertake a joint initiative to improve coordination between these programs and secure the participation of a greater number of community health centers as WIC providers.

That concludes my testimony. I appreciate the opportunity to appear here today.

AGRICULTURE AND RURAL DEVELOPMENT PROGRAMS

WITNESS

FAITH R. ROESSEL, EXECUTIVE DIRECTOR, NAVAJO NATION WASHINGTON OFFICE

Mr. DURBIN. Our next witness is Faith Roessel of the Navajo Nation.

We are running about 40 minutes behind, and I apologize to the witnesses. If any of you have planes to catch or demands on your time that are extraordinary, please let the staff know and we'll do our best to accommodate you. Please proceed.

Ms. ROESSEL. Mr. Chairman, and Members of the Committee and, in particular, Mr. Myers and Congressman Pastor. I appreciate the opportunity to present summary comments to you from the Navajo Nation. President Peterson was unable to make it here, and extends his apologies.

The Navajo Nation is the largest Indian tribe in the country. It spans into three states, Arizona, New Mexico, and Utah, and spans also into 12 counties, which makes it a reservation where there are particular challenges when you look to USDA as a county-based service provider. We have 12 counties.

One area of concern has been consolidation of services. And I am happy to report that the Navajo Nation has been working very diligently with USDA in trying to consolidate services and maximize the scarce resources to our tribe.

I am here today to highlight a few items for you. We have rather detailed testimony that covers four different categories that we believe are necessary to help the problems being faced by the Navajo people. Overall, you can imagine with the land base the size of West Virginia, which is our reservation size, we have just enormous deficits. We have an area of arid and semi-arid maces and valleys in northeast Arizona, northwest New Mexico and southeast Utah.

What we have is 56 percent of Navajo people living below the poverty line. Half of our people live in sub-standard homes without running water or electricity. And unemployment ranges from 38 to 50 percent, depending on the season.

Although the USDA is the congressionally-mandated lead federal agency for rural development, despite this mandate, the USDA has really never played a prominent role to address the Navajo Nation's rural development needs. And I daresay that this is a trend that you would see with other Indian tribes across this country as well. And really what is lacking is an express policy guidance from Congress to encourage USDA to exercise its responsibilities fully to American Indian tribes.

I would like to point out in our testimony two particular areas where we really do need attention. Number one is two water and land resources. In particular, we are looking toward SCS with a proposal for watershed planning. Our request is for a fulltime SCS watershed planning team. And we think this will greatly benefit the Navajo people, as well as downstream water users who will gain by the reduction of salt and sediment of the Colorado River system and protection of water quality.

Each year hundreds of thousands of acre feet of water cascade off of Navajo watersheds into the little Colorado River, San Juan and Colorado Rivers. The Navajo Nation is the single largest contributor of salt-laden sediment to these rivers.

Also, we have a real need for physical infrastructure. Two particular areas are rural development planning and solid waste disposals. The Navajo Nation is requesting appropriations of RDA for a comprehensive community and area-wide rural development planning strategy.

Comprehensive rural physical infrastructure assessments or planning have never been conducted on the Navajo Nation. In the era when the Farmers Home Administration was providing rural development planning grants, the Navajo Nation was unaware it could apply. Now that we are beginning to turn to USDA, Congress is no longer appropriating funds for area planning or comprehensive rural development planning.

Yet, federal investment in Indian rural development infrastructure, such as roads, housing, power, telecommunications, water systems and water disposals continue to be far below those levels in other rural areas.

A second priority under physical infrastructure is our great need for solid waste disposal. I'm sorry to admit to you today that we do not have one solid waste landfill or other waste disposal facilities in the Navajo Nation that are in accordance or compliance with USEPA guidelines and standards.

Some Navajo communities are transporting their solid waste to complying facilities off the reservation in New Mexico and Colorado. But this is a short-term solution and will not allow for a long-term solution to the over-reaching problem.

In closing, I would like to also point out in our testimony that we have highlighted for the committee what the Navajo Nation has been doing with the USDA in terms of trying to build a cooperative relationship. We fully take responsibility that we cannot just be here asking for a handout, but we have to be doing everything we can with the federal agencies, with our local county extension services to access the funds that are there. And we have outlined the efforts that we have made.

In particular, in the prior administration we worked very much with Secretary Madigan and met with him and his personnel in the consolidation efforts that were fairly successful. Also, we appreciate very, very much the attention by the Senate and House subcommittees on Agriculture with report language that was included last year. It helped a great deal because it did draw attention, and we were able then to use that with SCS in particular. And they have been especially cooperative in working with us, and we look forward to a new relationship with the new administration.

Thank you, Mr. Chairman.

Mr. DURBIN. Thank you very much, and let me ask you this, Ms. Roessel?

Ms. ROESSEL. Roessel. Yes.

Mr. DURBIN. Can you tell me what the Extension Service has offered to the Navajo Nation? We have included some language relative to that service in previous years appropriations bills. Can you tell us what it means to you?

Ms. ROESSEL. Well, the language in particular has meant that in terms of competing for scarce resources, we have been able to take that to the State Director and to say that Congress, in fact, does believe that there is a priority here that has been overlooked. And we have then worked very hard. Our first point of contact has been tough trying to do just education with the Extension Service as well as the other services USDA provides.

But, in terms of the last part of our testimony where we look at the Extension Service outreach for the Navajo Nation, I believe the Inter-tribal Agriculture Council will be testifying to more detail. We really do want to see funding of Section 2501(a) which would strengthen extension education and outreach to benefit all farmers and ranchers, disadvantaged farmers and ranchers.

And we have across this nation tribally community-controlled colleges, two-year institutions. And we think those institutions are well-suited for this type of funding to then get into the community.

The other part of this, however, is just we think an intermediate step. Because in the long term what we would very much like to see is access to the land grant institute system. That is the ultimate goal. We would like to see, especially when you think that Indian people with 50 million acres in the lower 48 states and economies nearly dependent on natural resources are not well-served by the current land grant system.

Mr. DURBIN. Thank you very much. Mr. Myers?

Mr. MYERS. Mr. Chairman, I yield my time to my colleague from Arizona, whatever time I might use.

Mr. PASTOR. I really have no questions, but just a comment. The Navajo Nation is a Native American Nation that has great needs. And as she has told you, the Navajo Nation extends out to New Mexico and Arizona. And I think you have also——

Ms. ROESSEL. Utah.

Mr. PASTOR. Utah. And it's a wide area that crosses different state boundaries and has counties in three different states. And they have some resources, but they also have some needs.

And I wanted to tell you that this morning at our Farmers Home, we were informed that they have requested an additional $10,000,000 that will go to help disadvantaged farmers through the community-based organizations and through land grant colleges.

So that may be something that you may want to look to in the future. They're going to release RFPs, I guess, sometime in the future. And so you may want to be on the lookout, because I think that your farmers and ranchers would qualify for some of these programs. And basically what you're asking is to provide technical assistance so that they can become more effective farmers and ranchers.

So some of the requests that you have, I think, Farmers Home is going to have this program and will be available to your community colleges and maybe to your non-profit groups.

Ms. ROESSEL. Okay. We'll follow up on that. Thank you.

Mr. DURBIN. Thank you, Ms. Roessel, for joining us today.

[The prepared statement follows:]

NAVAJO NATION WASHINGTON OFFICE

PETERSON ZAH
PRESIDENT

MARSHALL PLUMMER
VICE-PRESIDENT

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TESTIMONY OF THE NAVAJO NATION

BEFORE THE

APPROPRIATIONS SUBCOMMITTEE ON RURAL DEVELOPMENT,

AGRICULTURE AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

ON FISCAL YEAR 1994 APPROPRIATIONS

April 21, 1993

INTRODUCTION:

Mr. Chairman and Members of the Subcommittee, I am Faith Roessel, Executive Director of the Navajo Nation Washington Office. On behalf of President Peterson Zah and the Navajo Nation, I appreciate the opportunity to present the Navajo Nation's request to this Subcommittee and to make recommendations as you continue to work within the appropriations process for Fiscal Year 1994.

The Navajo Nation looks forward to working with the Subcommittee to build significantly upon the initial progress made last year in the Navajo Nation's first concerted effort to secure greater participation in U.S. Department of Agriculture ("USDA") programs. Provided below is the Navajo Nation's specific requests for USDA FY 1994 appropriations, as well as, some background information on the Navajo Nation and its expanding cooperation with USDA.

APPROPRIATIONS REQUESTS FOR USDA FY 1994 BUDGET:

The Navajo Nation requests the following appropriations for inclusion in the USDA FY 1994 Budget, to establish a base level of USDA assistance to the Nation:

Soil Conservation Service (SCS)		$1,694,000
Watershed Planning Team	400,000	
RC&D Critical Area Treatments	504,000	
Staffing of Field and Area Offices	790,000	
Agricultural Stabilization and Conservation Service (ASCS)		$1,200,000
Special Conservation Projects (ACP-LTA)	1,000,000	
Navajo Nation Office/Staffing	200,000	
Farmers' Home Admin./Rural Development Adm. (FmHA/RDA)		$11,719,000
Comprehensive Rural Development Planning	500,000	
Solid Waste Disposal	5,200,000	
Irrigation Water Systems	5,769,000	
Navajo Nation Office/Staffing	250,000	
Cooperative Extension Service (CES)		$1,000,000
Outreach to Disadvantaged Farmers/Ranchers	1,000,000	

PRIOR INITIATIVES:

The Navajo Nation is pleased we are building upon the results of our initial efforts (FY 1993) with the House and Senate Agriculture Appropriations Subcommittees regarding Navajo funding priorities. Report language was included last year by both Subcommittees recognizing our unique circumstances and critical needs (see attachment A).

Spurred by the Senate and House report language and the support of the former Secretary of Agriculture, working relationships were developed and strengthened with certain of the field and State offices of SCS and ASCS. Later in our testimony we describe in greater detail our emerging cooperative relationship with USDA. SCS and ASCS now recognize the enormous needs of the Navajo Nation and have done their best to stretch scarce dollars and accelerate their provision of assistance. In FY 1994, we recognize these efforts - if they are to continue - need additional resources. CES, FmHA and RDA, also require additional funds in order to move forward and make meaningful progress in alleviating years of federal neglect of the Navajo Nation's resource conservation, rural infrastructure and natural resources education needs.

THE NAVAJO NATION:

The Navajo Nation is unique among American Indians. The Navajo Nation encompasses almost one-third of all Indian lands in the lower 48 states, with a land area covering nearly 18,000,000 acres (as large as the state of West Virginia) of arid and semi-arid mesas and valleys in northeast Arizona, northwest New Mexico and southeast Utah. **The Navajo Nation spans portions of twelve counties in these three states, which creates unique challenges for the consolidation of the traditional USDA county-based service delivery system to provide more effective and streamlined Navajo access to USDA assistance.**

The Navajo Nation suffers from enormous deficits in all areas critical to prosperous rural livelihoods and well-being. Fifty-six percent of Navajo people live below the poverty line. Half of our people live in substandard homes without running water or electricity. Unemployment ranges from 38 percent to 50 percent, depending on the season. Navajo rangelands, farmlands and rural communities are today well below their potential for economic and social productivity, due to federal investments far below those enjoyed by other rural areas of America in natural resources conservation and management, as well as, rural, physical, economic and educational infrastructures.

NAVAJO NATION RURAL DEVELOPMENT NEEDS:

The Navajo Nation appreciates that the USDA is the Congressionally-mandated lead federal agency for rural development. **Despite this mandate, the USDA has never played a lead role to address the Navajo Nation's rural development needs.** What is lacking is explicit policy direction and guidance of Congress to encourage the USDA to exercise fully its responsibility to lead and coordinate phased, multi-year, aggregated federal rural development assistance, targeted to the Navajo Nation and other Indian tribes. We respectfully request that Congress state this policy through report language.

1). Water and Land Resources ($1,694,000 for SCS-Watershed Planning and $1,200,000 for ASCS-Conservation Projects):

Our request for a fulltime SCS Watershed Planning team ($400,000) will greatly benefit the Navajo people and will have significant benefits for the USDA. Downstream water users will also gain by the reduction of salt and sediment loading of the Colorado River system and protection of water quality. Each year hundreds of thousands of acre-feet of water cascade off of Navajo watersheds into the Little Colorado, San Juan and Colorado Rivers. The Navajo

Nation is the single largest contributor of salt-laden sediment to these rivers.

The SCS has now begun preliminary planning for one sub-watershed project by assigning (within the limits of available resources) technical staff when and as available. However, the enormity of the Navajo Nation land area, and the severity of our chronic soil and water conservation problems, require a more concentrated and accelerated approach.

Similarly, the Navajo Nation's request of $504,000 for short-term Critical Area Treatments (administered by SCS) and $1,000,000 for Conservation Special Projects (administered ASCS) will enable the Navajo Nation: to establish improved management methods and facilities on 88,000 acres of rangeland watershed; to retain annually at least 3,000 acre-feet of sediment, which otherwise would impair downstream domestic water supplies, irrigation facilities and wildlife habitat; and, to conserve more than 6,000 acre-feet of our precious water resources for beneficial use on 3,725 acres of farmland.

Also, in order to provide adequate technical support for the implementation of these conservation measures, full staffing by SCS of six Navajo soil and water conservation districts, and additional water resources staff at our SCS Area office will be required. We estimate that $790,000 will be needed. Additionally, the ASCS will need additional funds, estimated at $200,000, to open an office serving the Navajo Nation, as previously announced by the former Secretary of Agriculture (see attachment B).

2). Physical Infrastructure ($11,719,000 for FmHA/RDA-Planning and Construction):

Rural Development Planning: The Navajo Nation is requesting appropriations of $500,000 to the RDA (which has taken over the rural development responsibilities of the FmHA) to provide for comprehensive community and area-wide rural development, economic development, water development and waste disposal planning on the Navajo Nation. These will establish the basis for multi-year phased aggregated investments to eliminate the Navajo Nation's enormous rural development deficit.

Comprehensive rural physical infrastructure needs assessment or planning have never been conducted on the Navajo Nation. In the era when the FmHA was providing rural development planning grants, the Navajo Nation was unaware it could apply. Now that we are beginning to turn to the USDA, Congress is no longer appropriating funds for area planning or comprehensive rural development planning. Yet, federal investments in Indian rural development infrastructures (roads, housing, power, telecommunications, water systems and waste disposal) continue to be far below levels of investment in other rural areas.

Solid Waste Disposals: The Navajo Nation this year is prioritizing solid waste disposal and irrigation rehabilitation, of our many rural development infrastructure needs. The Navajo Nation is requesting appropriations of $5,200,00 to the RDA for the construction of two solid waste landfills, with satellite transfer stations, to meet the present and future needs of forty Navajo communities in the Arizona and Utah portions of the Navajo Nation. The Navajo Nation does not have any solid waste land fills or other waste disposal facilities in compliance with United States Environmental Protection Agency standards. While some Navajo communities and institutions are transferring their solid wastes to complying facilities in New Mexico and

Colorado, this solution is short-term for those able to afford it, and does not address the underlying need for a comprehensive solid waste disposal and management plan for the Nation.

Irrigation Water Systems: The Nation is requesting appropriations of $5,769,000 to allow for the complete reconstruction of irrigation systems serving 20,355 acres in twenty-six Navajo communities. There are more than 45,000 acres of irrigated family farms on the Navajo Nation. Up to two-thirds of these farmlands are idle or below optimal productivity today due to damage and destruction to irrigation facilities by flooding and sedimentation. **The rehabilitation of irrigation systems is perhaps the single most cost-effective investment for the revitalization of Navajo rural livelihoods and economy. To our knowledge there have never been any appropriations for the specific authorization in question (7 USCS 2204(c)).**

Congressional direction and guidance are needed to streamline Navajo Nation and other Indian tribes' access to RDA/FmHA programs of all kinds, especially water system and waste disposal system funding. In furtherance of our efforts to consolidate and streamline USDA service delivery to the Nation, we are requesting $250,000 to establish an RDA office on the Navajo Nation, to coordinate and facilitate rural development activities throughout our 18,000,000 acres. Additionally, the Navajo Nation request report language which stipulates that USDA-RDA make available their own staff through Interagency Personnel Agreements to help the Navajo Nation plan and organize for rural development, and to coordinate access to the bewildering diversity of federal rural development programs beyond those administered by USDA.

3). Educational Infrastructure ($1,000,000 for CES-Extension Outreach):

As an intermediate step to increase the capacity of the Navajo Community College (NCC) to conduct Land Grant Institute types of programs, the Navajo Nation is requesting appropriations of $1.0 million, as authorized under section 2501(a) of the 1990 Farm Bill (Pub.L. 102-624), to strengthen NCC's extension education and outreach to benefit our farmers and ranchers with technical assistance, field demonstrations, and clarified access to USDA farm service programs.

Navajo and other Indian rural communities are chronically and critically short of skilled professional and technical personnel needed to plan and implement all aspects of rural development. The BIA education system is among the worst in the country. The Navajo Nation needs the means to redevelop and rebuild our own educational systems, grounded in our language and cultural values and targeting needs we define.

The national Land Grant Institute system has proven enormously beneficial for the rest of the United States -- including not only the 50 states, but also the historically Black colleges and universities, and the very small land areas of Guam, Puerto Rico, the Virgin Islands, and even Washington D.C. Yet Indian people, by comparison, with 50 million acres in the lower 48 states and economies nearly entirely dependent on natural resources, are not well served by the existing Land Grant Institute system.

It is time that Congress afford Indian people the same rural education, extension and research benefits afforded the rest of the rural United States. The Navajo Nation has started

to urge the authorization and establishment of an Indian Land Grant Institute analogue. The Indian "Land Institutes" should be built onto existing Indian community colleges -- starting with the Navajo Community College as a pilot -- and must provide for the development of culturally-based four year and graduate programs in all natural resources, rural development, and associated rural enterprise and business fields.

NAVAJO NATION/USDA COOPERATIVE RELATIONSHIP:

In an effort to realize the USDA's rural development mandate for Indian tribes as well as for the rest of rural America, the Navajo Nation conceived, and in 1992 took the first steps toward implementing, a phased multi-year integrated program of planning, resource conservation, education and training, and rural development -- focusing on an enhanced cooperative relationship with the USDA, and with the House and Senate Agriculture Appropriations Subcommittees.

Administratively, we worked directly with former Secretary Madigan and his staff toward streamlining USDA service delivery to the Navajo Nation. Considerable progress has already been achieved in that regard with the SCS, whose Chief and top water resources staff visited the Nation in July of 1992, and saw for themselves the magnitude of our resource conservation needs. The ASCS, FmHa, RDA and CES also have evidenced a willingness to adapt their program delivery systems to the unique jurisdictional issues of the Navajo Nation. Some promising initiatives were cut short, however, by the change in administrations, and we are awaiting the appointment and confirmation of new ASCS, FmHA and RDA Administrators to resume our momentum.

Consolidation and streamlining of service delivery systems is only a first step. Much additional work is required to gain the full active commitment of these agencies to address in coordinated and systematic fashion the accumulated backlog of unmet Navajo Nation needs in the areas of resources conservation, integrated rural development, and natural resources education, research and extension.

The foundation for our expanding cooperative relationship with the USDA has been USDA's recognition of its own federal trust responsibility to the Navajo Nation (and other American Indian tribes), as well as, the beginning of USDA treatment of the Navajo Nation as a government through government-to-government agreements and allocations of technical and financial assistance commensurate with the magnitude of Navajo Nation needs.

CONCLUSION:

In conclusion, the Navajo Nation wishes to thank the Subcommittee for the support provided last year and we look forward to working with the Subcommittee on the funding initiatives proposed in this testimony. Accordingly, detailed justification packages have been prepared and will be presented later to Subcommittee staff in support of this testimony.

(Attachment A)

HOUSE APPROPRIATIONS COMMITTEE REPORT - AGRICULTURE FY 1993 APPROPRIATIONS

At page 72 of its Report (No. 102-617) on FY 1993 agriculture appropriations, the House Appropriations Committee last year recognized our needs, commenting specifically "the Committee is ... aware of the interest in providing additional technical assistance for range management to the Navajo Nation ..." .

SENATE APPROPRIATIONS COMMITTEE REPORT- AGRICULTURE FY 1993 APPROPRIATIONS

Likewise, the Senate Appropriations Committee stated in its Report (No. 102-334) on agriculture appropriations:

> "The Committee notes the Navajo Nation's proposal to establish a planning team to begin evaluating cost-effective solutions to the Navajo Nation's watershed resource conservation needs. The Committee encourages SCS to assist with this effort." (Page 70)
>
> "In addition, the Committee encourages SCS to assist the Navajo Nation by providing support for critical area treatments to address severe localized soil erosion and water conservation concerns." (Page 73)

(Attachment B)

DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20250

October 22 1992

Honorable Peterson Zah
President
The Navajo Nation
P.O. Box 308
Window Rock, Arizona 86515

Dear President Zah:

During our meeting in April, one of the primary concerns that you raised was the need for a more consolidated approach in the administration and delivery of services from the Department of Agriculture (USDA) to the Navajo Nation. USDA understands the problems the Navajo Nation has faced in coordinating activities between three State offices--Arizona, New Mexico, and Utah, and the various county offices.

I asked the Agency Administrators for the Farmers Home Administration (FmHA), Rural Development Administration (RDA), Agricultural Stabilization and Conservation Service (ASCS), and the Soil Conservation Service (SCS) to review the feasibility of consolidating delivery of the various USDA programs through one State. I am pleased to inform you that the respective Arizona State offices will be designated as the lead offices for coordinating the respective agency programs for the Navajo Nation. This should simplify communications between USDA agencies and the Navajo Nation. Below is a more detailed summary of each agency's organizational plan and movements toward simplification of the delivery of USDA programs to the Navajo Nation.

On June 30, 1992, FmHA executed a joint memorandum with RDA notifying the Arizona, New Mexico, and Utah State Directors that the Arizona State office in Phoenix will be the lead for the provision of all program services to the Navajo Nation. The necessary geographical codes have been established in the County Look-up files for Navajo borrowers and the procedures for implementing this change are in place.

AN EQUAL OPPORTUNITY EMPLOYER

ASCS will make arrangements to support an office in Window Rock, Arizona, which will be overseen by the Arizona State ASCS office. This office will administer all applicable Conservation and Environmental Protection Division (CEPD) programs on the Navajo Nation including allocations. Producers on Navajo lands will continue to have the option of participating in programs through the nearest ASCS county office. Under this new system, the Window Rock ASC Committee and the Arizona State ASC Committee shall establish the priorities for CEPD programs and determine the distribution of allocations.

SCS will also coordinate all technical assistance for Navajo lands in Arizona, Utah, and New Mexico from Window Rock, Arizona. The office there will be supported by technical staff from the SCS Phoenix State office and will have the responsibility of ensuring that field office technical guides are consistent for use on all Navajo lands. The Crown Point, New Mexico field office will be restaffed in accordance with the provisions of Section 2501(g) of the Food, Agriculture, Conservation, and Trade Act of 1990, to service the Navajo's "checkerboard lands" as well as the satellite reservations of Ramah, Canoncita, and Alamo. Contingent upon the availability of suitable office space, the office at Tuba City, New Mexico, will be similarly restaffed. In addition, SCS will adopt ASCS's one "docket" processing for all Navajo lands. This will provide an opportunity for the Navajo Nation to be directly involved in selecting conservation practices and the associated rate of cost share, and arrange for SCS to represent ASCS at remote locations.

Through these efforts, the programs and services that USDA provides will be made much more accessible to the Navajo people. I look forward to continuing our work together and would invite you to contact Mr. James Pace, Director of Native American Programs, for any further assistance or information at (202)720-3805.

Sincerely,

Edward Madigan

Edward Madigan
Secretary

WITNESS

HON. MICHAEL J. KOPETSKI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. DURBIN. Our next witness is Congressman Kopetski.

Mr. KOPETSKI. Thank you, Mr. Chairman. My pleasure to be here. And I appreciate this time. I do have a full statement, but I'll just hit the highlights of it in the interest of time. I do want to talk about a couple of very exciting programs that are going out in the northwest. These are not just Fifth District of Oregon-oriented. These are Oregon, Idaho and Washington cooperative projects that are leading edge examples of cooperation between farmers, the states, the educational institutions and the commodity commissions.

This isn't folks coming in here and asking for government to do it all.

We're asking for government to do a little bit in the area of the Northwest Center for Small Fruits, for example, we're asking for just a little bit of money to continue the program that this committee supported last year with federal funds. We're completing the center now, and we want to ask the federal government to include research dollars so that we can develop ways for newer and more acceptable pest management controls, especially in the light of the current situation with the FIFRA reauthorization and minor use of pesticides, genetic research, production practices, processing, packaging technology, and marketing development.

We do this through an existing network between Oregon State University, Washington State University, which is located near Spokane, Washington and the University of Idaho. We are only asking for $2.75 million for this particular project.

In a second area, is another very exciting cooperative venture—the second leading industry crop in Oregon is the nursery industry. Mr. Chairman, we all know the environmental benefits of ornamental landscaping and green plants that this industry provides to the highways and byways and to people's backyards. And it's really what we want to be doing internationally in this whole area.

As I say, Mr. Chairman, it's the second leading farmgate product in Oregon, a very important industry. This project is a cooperative venture between Oregon, Idaho and Washington. We're not asking for too much money $1,500,000. Again, this will augment the existing facility in Corvallis, Oregon. But it also will be shared with Washington and the State of Idaho.

The other item that I want to draw your attention to is the International Northern Forest Organization. The environment has been brought to the attention of the world, especially through the United Nations conference on environment and development in Rio last year, where the delegates adopted a statement for International Forestry principles.

This isn't somebody else's back yard we're talking about. We're talking about our own, not just the rain forests in South America. We're talking about the woods in the northwest. And here we can actually do something positive about that. And that's what the INFO program is all about.

It's a collaborative research project, again with Oregon State, the University of Oregon, the University of Washington, and Washington State Universities, and the Forest Service Pacific Northwest Research Station.

The principal purpose of INFO is to assist in the development of policies for sustainable forests and communities through the study of linkages among international trade in forest products, the management of northern forests, and the regional and global environments and the economies.

Last year INFO received $200,000 from the Department of Agriculture, Forest Research budget. And we're asking for $600,000 over a five-year period.

The next item is the Northwest Food Processing and Marketing Initiative. We grow, as I mentioned earlier, some of the best products in the world. And if you can add a little bit of value to them, whether it's the seafood or fruits or vegetables, you enhance that value, and it's more money to our states and the federal government.

So we're asking for help from the federal government in the Northwest Food Processing and Marketing Initiative. This would accomplish a lot. Again, it's a partnership with the federal, state, the university and the private ventures. It will expand the current food processing and technology programs at the three universities involved in these states.

With this project, we're asking for a little bit more money. It's $4.9 million that would be granted to CSRS for construction of the innovation center, not in my district, but in Portland, Oregon, and some private facilities at the University of Idaho.

Over there on the coast in Astoria we're very supportive of the Oregon State University Seafood Research Lab that's in Congresswoman Furse's district. And, finally, wood utilization, Hops, Northwest Potatoes and Barley research need some help in their funding for this important research. This would be done at Oregon State University. I'm asking for a $345,000 appropriation for the continuation of the hop research program. There are a lot of hops in my district, near the Speaker's District in eastern Washington, and this is important processing research for the beer industry, which we have a very successful one, Mr. Chairman, in this country.

All of this is to show that agriculture, of course, is one of the leaders in terms of our balance of payments. If it wasn't for agriculture, we would be in serious problems with our international trade, even more so than we are today. But it doesn't happen magically. It happens with hard work. We need the basic research to stay competitive and in the leading edge with so much going on in the world in terms of the environment and with pesticides.

The competition gets stronger worldwide, so our marketing ventures have to be leading edge and all of this takes a little bit of money, but we get a lot more money back—through our federal and corporate income taxes as well.

Mr. Chairman, I'll be glad to work with you and the committee staff on refining these numbers. And thank you for your time in this matter.

Mr. PASTOR. Thank you. Let me ask you a question. The Chairman will probably have some other questions. But on the seafood research laboratory?

Mr. KOPETSKI. Yes. There's a number of different issues that are important. Food safety issues, for example, are critical in this industry. We are looking at different ways we can blend seafood products with agricultural products in the valley. And, again, seafood is a value-added product which increases the take for the farmers and food processors as well.

Mr. DURBIN. Thank you for your testimony as well.

Mr. KOPETSKI. Yes.

[The prepared statement follows:]

TESTIMONY OF THE HONORABLE MIKE KOPETSKI
BEFORE
THE SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE
AND RELATED AGENCIES

COMMITTEE ON APPROPRIATIONS

April 21, 1993

Thank you Mr. Chairman and members of the subcommittee. I have a written statement which I will ask to be inserted in the record and I will only highlight some aspects of it.

Northwest Center for Small Fruits Research

Mr. Chairman, as you know, the Northwest states of Oregon, Idaho, and Washington are the national center for production and processing of berries and cool climate winegrapes. The unique regional climatic combination of long summer growing days, cool nights, and moderate temperatures yields fruit of superior character.

Mr. Chairman, the industry comprises 2,800 growers and 240 processors with processed value of $354 million. Most of the farms involved in this industry are small family-owned operations with an average size of 25 acres.

Several years ago, these small fruits producers and processors recognized the deficiency of their industry in basic research. The industry came up with the idea of a small fruits research center that would fill a void in basic research for small fruit crop production and processing and help this industry better compete in the world marketplace for premium products. Last year, with the federally supported and funded feasibility study of the center completed, this committee recommended construction and research funds. Research priorities have been established and include newer and more acceptable pest management (especially in light of the current situation with FIFRA reauthorization and minor use pesticides); genetic research; production practices; processing and packaging technology; and market development. The center will also augment support for expanding the existing network between Oregon State, Washington State, and the University of Idaho. This regional network will be developed to create a national exchange network for small fruit research.

The planning for the center is already a successful example of a federal, multi-state, and industry partnership that can work to enhance our country's competitiveness. The federal government contributed $300,000 in FY 1991, $2,337,000 in FY 1992 and

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$437,000 in FY 1993. The Commodity Commissions in Oregon, Washington, and Idaho have contributed $1.9 million and the Northwest Land-grant Universities have chipped in with an additional $3.1 million.

I respectfully request that $2,750,000 be appropriated for the Northwest Center for Small Fruits Research for Fiscal Year 1994. $750,000 of these funds will go toward three Agriculture Research Service scientists and $2,000,000 to fund the Cooperative Applied Research Network through the Agriculture Experiment Stations.

Northwest Nursery Crops Research Center

Mr. Chairman, nursery crops also are a valuable industry in the Pacific Northwest as well as a major agricultural commodity throughout the rest of the country. USDA figures indicate that the nursery industry (ornamental, landscaping and green plants and turf) had wholesale sales of $7.8 billion in 1990. The 1989 Oregon Association of Nurserymen Survey indicated that the overall economic impact of the nursery industry on Oregon alone was over $1 billion. Additionally, a 1985 study showed that the nursery industry employed an estimated 43,000 people year around, with a peak employment figure of about 102,000. The same study indicated an annual U.S. payroll of nearly $560,000,000. As an agricultural commodity with no federal subsidies, its net contribution is significant when compared to most other commodities.

Mr. Chairman, this is an important industry and one that, I think, will play an increasingly important role in the overall liveability in this country. The benefits of plants in the environment are becoming more recognized, cleaning our air, cooling of our urban "heat islands" and homes, noise reduction, heating and cooling cost reduction and privacy.

Additionally, this industry is extremely diverse. Estimates indicate that up to 5,000 different varieties of nursery stock are produced annually on growing operations that tend to be located near urban areas. This diversity leads to numerous production and pest problems requiring extensive research while the proximity to urban areas underscores the need for environmentally safe growing methods. In fact, as the public demands more and more plants and trees to help clean and cool the air and improve water quality, the nursery industry is playing an expanding and significant environmental and research role. The Northwest nursery industry has responded to the increased research and marketing needs in recent years. For example, in Oregon, research and marketing funding, mainly from the Oregon Association of Nurserymen, Inc. exceeded $525,000 in 1991. But more is needed.

To meet this research demand, a tri-state coalition of nursery growers in the Pacific Northwest has developed a proposal to establish a USDA/ARS Nursery Crops Research Center located at the USDA/ARS Horticultural Research lab in Corvallis, Oregon. This proposal requires the addition of more ARS scientists dedicated to nursery crop research. With additional funding through the USDA/ARS Northwest Nursery Crop Research Center, more work in Oregon, Washington and Idaho could be funded through

Specific Cooperative Agreements to scientists with appropriate expertise.

I respectively request that an additional $1,500,000 be appropriated for the Northwest Nursery Crops Research Center through the existing ARS facility in Corvallis, Oregon. These funds will go towards new ARS scientists, ARS post-doctoral support scientists and ARS program support.

Forest Ecosystem Research Laboratory

Mr. Chairman, as you may know, the federal agencies, scientists and policy-makers are continuing to move in the direction of ecosystems management for many of our natural resources. This is nowhere truer than in the forests of the Pacific Northwest. The Pacific Northwest has produced and continues to produce much of the new research on alternative new forest management prescriptions and environmental sustainability.

I say with some pride that the forestry program at Oregon State University is a national focal point for forest policy and economics, forest ecology, multiple forest uses and wood products. In addition to its world-renowned College of Forestry and Forest Research Laboratory, scientists from the USDA Forest Service's Pacific Northwest Research Station, EPA's Corvallis Environmental Research Laboratory, USDI Bureau of Land Management, Fish and Wildlife Service and National Park Service form an interacting community dedicated to research on a broad spectrum of forestry research. Further, OSU faculty are very active in advising policy makers at the state and federal levels on issues affecting the economy and ecology of the forest areas of the northwestern states. For example, the Scientific Panel on Late-Successional Forest Ecosystems, which developed the Alternatives for Management of Late-Successional Forest of the Pacific Northwest, included John Gordon, K. Norman Johnson and Jerry Franklin, each of whom have had distinguished careers at OSU.

Currently, research is limited by inadequate facilities. Antiquated laboratories in the OSU Forest Research Laboratory and inadequate space in the College of Forestry make it difficult to meet the need for new information required by policy makers now and in the future. Mr. Chairman, I request $500,000 from CSRS FY 1994 Buildings and Facilities funds to be used in planning and design for a new building which will vastly improve the research capabilities of the Forest Research Laboratory.

International Northern Forests Organization (INFO)

Considerable public attention was paid last year to the complex debate over environmental concerns and economic development stimulated by The United Nations Conference on Environment and Development in Rio de Janeiro, where delegates adopted a statement for international forestry principles. Delegates also approved a new UN Commission on Sustainable Development to monitor and address sustainability issues for forests in developing and developed nations. The President's 1994 budget proposes to invest $30 million in 1994 and $50 million in each of the next fours years, towards the

goal of reducing world-wide deforestation.

Additional activity in international forest policy related to tropical areas is taking place in conjunction with the current renegotiation of the International Tropical Timber Agreement, reforms at the World Bank and efforts to establish a Consultative Forum for the UN Food and Agriculture Organization's (FAO) Tropical Forestry Action Programme. Importantly, increased concern for the role of tropical forest in global and regional environments and economies has generated increased interest in temperate and boreal forest policy issues. Traditionally, policies affecting these regions have been the result of national policies implemented by developed countries with limited with limited multilateral coordination. To develop a more formal framework for international forest policy, the International Northern Forests Organization (INFO) is proposed as a forum for policy development and research.

INFO is the program of a collaborative research project of the research universities of the Pacific Northwest (Oregon State University, the University of Oregon, the University of Washington and Washington State University) and the USFS Pacific Northwest Research Station. The principal purpose of INFO is to assist in the development of policies for sustainable forests and communities through the study of linkages among international trade in forest products, the management of northern forests and the regional and global environments and economies.

INFO received $200,000 from the FY 1993 USDA Forest Research budget. However, the conference report made clear that the Subcommittee considered this base funding and directed that any additional funding above this level be sought through USDA/CSRS. Mr. Chairman, I respectfully request a CSRS Special Research Grant of $600,000/year for five years. These funds will go toward research on the linkages between trade and environmental impacts around the world with a focus on sustainable biodiversity, emissions, habitat, recreational and economic impacts.

Northwest Food Processing and Marketing Initiative

Mr. Chairman, as you may know, another cooperative effort being undertaken is the Northwest Food Processing and Marketing Initiative; also known as the Food Innovation Center. Northwest agriculture is rich in diversity with nearly 200 separate commodities raised throughout the region. This agricultural diversity produces a farm gate regional income in excess of $9 billion. Yet even with this regional diversity, agricultural processing lags far behind in processing value added products. The region accounts for only $3 billion in combined food processing.

Oregon, Washington, and Idaho are uniquely positioned to the Asian Pacific Rim, the world's most expansive market. Yet the northwest states market 75 percent of their agricultural production in bulk commodity form. As Japan, Taiwan, Thailand, Malaysia, Singapore, Indonesia, and Australia are experiencing growing consumer demand for high value processed food products, the Northwest needs to produce and market high value

added processed products. Achieving such a goal would create jobs, provide economic diversity to the northwest, and help alleviate our massive national trade deficit.

The Northwest Food Processing and Marketing Initiative would accomplish this through a cooperative federal, state, university, and private venture. The Food Innovation Center will expand the current food processing and technology programs at Oregon State University, Washington State University, and the University of Idaho. The Food Innovation Center will establish food processing incubator centers, develop a food packaging laboratory, and set up an overall integration of market techniques and implementation strategies to ensure customer satisfaction. This regional approach to food processing and marketing can be coordinated through the Western International Trade Development Center.

Mr. Chairman, I request that a $4.9 million appropriation be granted to the Cooperative State Research Service for construction of the Pacific Northwest Regional Food Innovation Center in Portland, Oregon and pilot facilities at the University of Idaho.

Oregon State University Seafood Research Laboratory

Mr. Chairman, I also would like to express support for a $300,000 appropriation for the Oregon State University Seafood Research Laboratory in Astoria, Oregon. One need only pick up the daily newspaper to recognize the growing importance of seafood in our diets and I can not think of a more worthwhile or timely project and I support it wholeheartedly.

Wood Utilization, Hops, Northwest Potatoes, and Barley

In closing Mr. Chairman, I would like to express my strong support for established projects that have a long history of demonstrated results. I support an FY 1994 appropriations of $4,153,000 for continuation of the USDA/CSRS Special Research Grant funding the center for Wood Utilization Research at Oregon State University. I support an FY 1994 appropriations of $345,000/year for the continuation of hop research in the Pacific Northwest; a continuation of funding for potato research with an additional appropriation of $300,000 for potato varietal research and a FY 1994 appropriations of $420,000 for Phase II of the USDA/CSRS Regional Barley Mapping Project.

Mr. Chairman, thank you for the opportunity to speak before you and the Committee. Please do not hesitate to contact me personally if you have any questions regarding my testimony or require my assistance in support of Subcommittee action.

AGRICULTURE AND RURAL DEVELOPMENT PROGRAMS

WITNESS

HON. DOUG BEREUTER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

Mr. DURBIN. Mr. Bereuter, from the state of Nebraska.

Mr. BEREUTER. Thank you, Mr. Chairman.

Mr. DURBIN. Thank you for joining us.

Mr. BEREUTER. I appreciate your time today. I would just ask unanimous consent that my whole statement be made a part of the record and that I might be allowed to summarize.

Mr. DURBIN. It will be made a part of the record, and the brevity of your testimony will assist you dramatically.

Mr. BEREUTER. Thank you very much. My testimony is largely straightforward endorsing elements in the administration's budget with respect to the CRP Program, the Wetlands Reserve Program, the Sustainable Ag and Research and Extension Program. And I also support the administration's request for the Hazardous Waste Management and Resource Program of $16 million.

I do have a suggestion as to how one element should be earmarked. And that I have provided for you and your staff in detail. It relates to the problem of carbon tetrachloride contamination resulting from CCC grain bin sites. Those 72–75 sites are identified across the states of Nebraska and Kansas.

I started with Secretary Yeutter to begin a program since that carbon tetrachloride had found its way into municipal water supplies in many small communities around those states. And I suspect that as USDA looks at it further, they will find it is in other states as well. It was a fumigant used at those grain bin sites. So it is important, that in fact, there be enough allocated of that $16 million for the purpose it was originally started.

I did want to mention two specific items in national programs, one in which you have a substantial interest I know—the Farmers Home Administration 502 Unsubsidized Loan Program for housing.

The program I got started and helped refine through the Banking Committee slot I have, yesterday, they ran out of program funds for fiscal year 93. It is a program that is going like gangbusters. It addresses families whose income is 80 percent to 115 percent of median area income. The default rate is 1.1 percent. It is very low. It is anticipated that it will not, even several years down the road be more than 4 percent.

So the administration is requesting $11 million in budget authority which would give us a program level of about $682 million. And I certainly support that. Although I think the way the program is going, this won't be enough for fiscal year 94. I would be happy to answer any questions on that one later if there are any.

Regarding the Research and Conservation Development District, there is no indication how much the administration will budget for this function. But they anticipate there will be 450 RC&Ds by the year 2000. We have two newly-authorized ones, four applications in the process. We started late, so I am concerned that we meet that goal if in fact we can by the year 2000.

And finally on the Nebraska-specific programs. And that is on the last page of my testimony, all of those elements, including SAT which would serve as 43 land grant institutions, are current levels except for one.

I would just say that the last item there, chinch bugs, is a particularly vehement kind of destructive pest that only affects portions of Kansas and Nebraska. So if the research doesn't take place at Kansas State University or the University of Nebraska, we're never going to find a solution to this problem. It is devastating under certain weather conditions, absolutely ruining rural crops and alfalfa from the wheat fields.

Mr. Chairman, I appreciate the good assistance and cooperation and help I've received from this committee in the past, and I thank you for that and look forward to continuing to work with you.

Mr. DURBIN. Thank you very much. Let me refresh my memory. Is that Farmers Home 502 Program the one that goes through Fannie Mae?

Mr. BEREUTER. Yes, it does. They are the secondary market that has made it work.

Mr. DURBIN. I agree with you completely. I think that's one of the best things that we do. It was part of our stimulus package. We are hoping even today that something will come of that in the Senate that might give us a chance.

Mr. BEREUTER. It only matches what has been available to urban residents through the HUD Program through the years.

Mr. DURBIN. Well, it's working pretty well. But we sure can leverage a small amount of money into a lot of construction with it.

Mr. BEREUTER. Right.

Mr. DURBIN. Now, we're going to enlist you in our crusade here against the self-appointed pork busters who have targeted your projects pretty well. They happen to believe that ag research is unnecessary, or at least ag research that they don't approve of. And I hope and I know that you will join us in educating our colleagues about the importance of this research.

Mr. BEREUTER. The difficulty with ag research is that we're not spending enough and spending it well.

Mr. DURBIN. I hope you'll share that with your colleagues in the pork busters brigade as we will on our side of the aisle.

Mr. BEREUTER. Thank you.

Mr. DURBIN. Thank you. Mr. Skeen?

Mr. SKEEN. Thank you, Mr. Chairman. Doug, it's great having you here.

Mr. BEREUTER. Thank you.

Mr. SKEEN. I'll tell you one suggestion I would make to you.

Mr. BEREUTER. Okay.

Mr. SKEEN. If we have any trouble with those pork busters, would you bring a bag of those chinch bugs? Because I've heard about chinch bugs all of my life, although I've never seen one, I don't think.

Mr. BEREUTER. They're so small they'll never know what hit them.

Mr. SKEEN. I think a good dose of chinch bugs on the floor over there would heighten their interest in ag research.

Mr. DURBIN. Thank you very much. Thanks for joining us.

Mr. BEREUTER. Thank you very much, Mr. Chairman, members of the committee.

[The prepared statement follows:]

TESTIMONY BY
HONORABLE DOUG BEREUTER
BEFORE THE
HOUSE SUBCOMMITTEE ON RURAL DEVELOPMENT,
AGRICULTURE, AND RELATED AGENCIES
APRIL 21, 1993

Chairman Durbin, Congressman Skeen, and members of the Subcommittee, thank you for the opportunity to testify before your subcommittee to support funding for several programs of national importance and for specific programs of special interest to my constituents and the citizens of Nebraska.

I. NATIONAL PROGRAMS

A. FmHA 502 Unsubsidized Loan Guarantees

Mr. Chairman, I'd like to begin with a few words in support of the Farmers Home Section 502 unsubsidized loan guarantee program. I am most supportive of the Administration's request of $11,000,000 in budget authority for this program. It is projected that an appropriation at that amount would finance 11,420 houses. The program has a very low default rate of only 1.1 percent as of March 31, 1993. The program has been so successful, in fact, that the entire $329.5 million program level provided for fiscal 1993 was exhausted yesterday.

Mr. Chairman, you'll likely recall that you and I and our staff have communicated on this successful program during the past several months, but let me briefly highlight it for the record and for the rest of the committee.

This is a housing program I proposed and pushed through my membership on the House Banking Committee. After a very successful 20 state demonstration program in 1991, the 502 unsubsidized loan guarantee program was expanded to all 50 states in 1992. Once the program was in place, I successfully pushed in the authorizing committee for the income limits of the program to be expanded from a top limit of 100% of median area income to a top income of 115% of median area income to match existing HUD programs for urban areas.

I am, as you might expect, very supportive of additional appropriations for this program. The Clinton Administration is equally supportive, requesting a $11,000,000 budget authority for fiscal 1994.

This unsubsidized loan guarantee program, even though it is just getting started, has proven to be very popular with borrowers, lenders, and the secondary market since its inception in 1991. A large number of loans have been made since the program was expanded to all 50 states, and more and more middle income citizens are being served now that the income limits have been increased to 115% of median area income. I do hope, Mr. Chairman, that the committee will fund the 502 unsubsidized loan guarantee program at the full level recommended by the Administration.

B. Conservation Reserve Program

My other main focus today is to support funding for the enrollment of new Conservation Reserve Program (CRP) lands during fiscal year 1994. Therefore, I am pleased that the Administration's budget allocates sufficient funds ($1.8 billion) for a one million acre signup in 1994 with the remaining 1.5 million acres to be enrolled in 1995. The nation has asked producers to meet increasingly stringent conservation compliance requirements and I believe that the general public should support these efforts at least to the extent that was provided for in the 1990 Farm Bill.

I also believe that priority should be given with CRP funds to allow partial field enrollments, such as contour grass strips, waterways, end-rows (particularly for fields in which no-till, ridge-till, or minimum tillage is being utilized), and field windbreaks in order to maximize the environmental protection to the land with the limited amount of funds which will be available.

C. Wetlands Reserve Program

Similarly, I urge the Subcommittee to follow the Administration's budget recommendation ($370 million for fiscal year 1994) to enroll 1 million acres in the Wetlands Reserve Program by 1995, with 450,000 acres to be enrolled in 1994. The pilot project was funded to cover 50,000 acres but received applications for sign-up of nearly 500,000 acres in the pilot states. The program provides benefits for water quality, flood control, recreation, as well as fish and wildlife. Since the rainwater basin area in Nebraska has received joint venture status under the North American Waterfowl Management Plan, availability of this program to landowners in Nebraska, for example, would be very useful. Studies indicate that nutrient reserves acquired during spring staging in south-central Nebraska are critically important to the reproductive success of both ducks and geese. This area is recognized as important migration habitat for endangered species and other migratory water birds.

D. Sustainable Agriculture Research and Extension

For research and extension projects, I would like to express my support for the Sustainable Agriculture Research and Education Program (SARE). The SARE program is the only federal research and education program focussing solely on sustainable agriculture. The program is also unique in that it includes farmers in the research process, it integrates research and extension, it addresses whole farm systems, and it creates partnerships between public agencies and private research and education organizations. Recently, the Center for Rural Affairs in Walthill, Nebraska issued a "Report Card on USDA Research Policy." In the report, authors Elizabeth Bird and Chuck Hassebrook summarize and reiterate General Accounting Office findings that the Sustainable Agriculture Research and Education Program (SARE) has been effective in supporting research and education which, in turn, helps farmers utilize sustainable agricultural practices.

E. AG*SAT

I would also like to express my strong support for adequate funding ($3.5 million) of the National Agricultural Telecommunications Satellite Consortium or AG*SAT -- headquartered at the University of Nebraska-Lincoln. This important project consists of 43 land-grant institutions in 38 states and permits students throughout the country to have access to the brightest professors and most recent curricula in agriculture and natural resources-related topics.

F. Pre-Harvest Food Safety Research

In regard to food safety research, Mr. Chairman, I support efforts to dedicate research to the "pre-harvest" segments of food production. Currently, there is no governmental oversight of this segment of the food chain, and given the recent outbreak of E. coli contamination of meat in the northwest United States, it seems prudent to devote FSIS funds to food safety research both on the farm as well as in the processing facilities.

G. Hazardous Waste Management and Response

I support the Administration's request for $16 million to fund critical health and environmental cleanup programs through the USDA's hazardous waste management and response programs, and I urge the subcommittee to prioritize funding for carbon tetrachloride contamination cleanup in Kansas and Nebraska. I started this program with the assistance of Secretary Yeutter who realized that the carbon tetrachloride problem was significantly caused by materials used at CCC grain bin sites. Since those grain bin sites were concentrated in Nebraska and Kansas, Secretary Yeutter made it a priority project for cleanup. In January, the Commodity Credit Corporation released a list of 75 grain storage facilities contaminated with carbon tetrachloride that pose health threats -- all of these sites are located in Nebraska and Kansas. Sufficient Federal funding is necessary to address this hazardous situation and to ensure the safety of surrounding communities.

Mr. Chairman, if an adequate funding level cannot be provided for the CCC under the USDA Central Fund to meet the tremendous amount of work in Nebraska and Kansas, then this Member believes the CCC could better perform its functions if it were removed as a participant from the Central Fund and allowed to have its expenses charged against CCC accounts. Currently, CCC Operations and Maintenance expenses for Hazardous Waste Management are already being paid from a CCC account in this manner. An alternative would be to combine all CCC expenses (investigations, design, construction, and operations and maintenance) into a single CCC appropriation and establish a ceiling where CCC could not exceed a specified amount.

H. Resource Conservation and Development

Finally, Mr. Chairman, I would like to urge the Subcommittee to adequately fund the Resource, Conservation & Development program. Although it is not clear from the Administration's budget what amount of the Farmer Service Agency budget is devoted for RC&D purposes, the 1990 Farm Bill authorized up to 450 RC&D areas by the year 2000. In Nebraska alone, there are two existing RC&D's, two newly authorized RC&D's in need of funding, and

four RC&D's whose applications are pending. Mr. Chairman, funding allocated to these grass roots organizations helps motivated volunteers develop feasible and highly desirable local resource development projects.

II. NEBRASKA-SPECIFIC PROGRAMS

In addition Mr. Chairman, I would like to express my support for various agricultural research and extension projects currently being performed at the University of Nebraska-Lincoln. The University of Nebraska-Lincoln is performing valuable research in important agriculture and ag-related fields including:

- Non-food agricultural products ($110,000)
- Food processing ($50,000)
- Sustainable agriculture ($70,000)
- Rural Policy Research Institute (RUPRI) ($200,000)
- Rural housing policy ($80,000)

Likewise, I support the following Extension projects also currently being performed at the University of Nebraska-Lincoln:

- Disadvantaged farmer assistance grants ($365,415)
- Rural development assistance ($350,000)
- Chinch bugs and the Russian Wheat Aphid control ($64,320)

These research and extension projects are important to ensure that new uses are developed so farmers can receive fair prices for their crops and to ensure that sustainable agriculture policies are developed and followed.

Again, Chairman Durbin, Congressman Skeen, and members of the Subcommittee, thank you for the opportunity to testify before your Subcommittee.

RURAL HOUSING

WITNESS

CHARLES L. EDSON, COUNCIL FOR RURAL HOUSING AND DEVELOPMENT

Mr. DURBIN. Mr. Charles L. Edson, with the Council for Rural Housing and Development. Thank you for your patience.

Mr. EDSON. Thank you, Mr. Chairman. My name is Charles Edson of the law firm of Peabody Brown here in Washington, D.C. I am counsel to the counsel for rural housing and development, which is a group which represents owners, developers, and managers in the Section 515 program, which is the Farmers Home rental housing program.

We have about 350 members, and 22 state affiliates including that in Illinois. I recently had the pleasure of meeting with the Chairman and commiserated at the long hearings that are necessitated by the many people who want to testify. So I will try not to be part of the problem. But if I may submit my statement for the record, and just make a few key points.

Mr. DURBIN. We have a saying in this committee that brevity is next to godliness.

Mr. EDSON. Thank you. And I will try to comply.

Our real problem is this in the president's proposed budget. He is proposing a $600 million increase for the Section 502 direct loan program. That is not the program that Congressman Bereuter talked about, which was a guarantee program for moderate income people. As a junkie of the Banking Committee and Housing Subcommittee, I know how hard the Congressman worked to get that through.

The direct loan program is a subsidized loan down to one percent. The single family program is being increased by $600 million in the budget. The multi-family program, 515, is being reduced by $27 million.

I find that very surprising from an Administration that really is emphasizing the lower income people and their needs. Because the medium income of people purchasing homes under 502 is $15,900 a year. For those who rent, it is $8000 a year.

You heard testimony this very morning from Farmers Home that 65 percent of our tenants are below 50 percent of medium.

I like the Section 502 program. I wish it extremely well. But I think perhaps a $600 million increase for that program will cut the rental housing program which services lower income people, and perhaps carries a good thing too far. And I hope that the committee will examine those priorities when you do get to your mark-up.

The other point that we would like to make is on rental assistance. Under the 515 mechanism, the subsidy of the one percent loan is not deep enough to help really low income people, who have been paying 50 to 60 percent of their income for rental. Rental assistance allows them to pay only 30 percent of their income for rent.

There was a shortfall of $65 million in rental assistance last year, which the president's budget seeks to remedy. But this is just to renew contracts, but there is a crying need for more rental as-

sistance. You have vacancies in Farmers Home project and needy tenants, but they cannot afford the basic rent.

We would suggest that the $75 million that the administration is seeking for rural vouchers, which is to house people in private housing, non-Farmers Home, and often that stock just is not there, be utilized instead for increased rental assistance to meet the need for those projects that are empty now but could be filled in Farmers Home if we had rental assistance.

And if more rental assistance is needed, it should not be transferred for the rental assistance earmarked to go with the new construction program, because we need those units. But again, I would suggest that maybe just a slight reduction in this huge increase in Section 502 direct funding would remedy that situation.

We are not here to bust the president's budget, but to bring it on to what we think had been the president's real priorities.

We talk on Farmers Home reorganization. We do with limitations favor transfer of the housing programs to the Rural Development Administration, a shift of our past policy. But the Farmers Home Administration is going to become a farm agency entirely, and deemphasize and not emphasize housing.

We are following the suggestion made by the Chair that we discuss and meet with members of the committee one on one to discuss this pressing problem. Because we are doing that, I think that I can bring my prepared testimony to a close.

Thank you, sir.

Mr. DURBIN. Thanks for your testimony. I appreciate it very much. We have had a chance to talk. And you know that I am going to do my best to try to help you. I think that we have some real serious rural housing problems. Although I was extolling what I consider to be the virtues of the guarantee program, there are certainly areas of need for very low income families, which cannot be served by that program.

Mr. EDSON. By that program.

Mr. DURBIN. So I am hoping that we can work together with you to try to solve some of these problems. I thank you so much for waiting patiently for so long.

Mr. EDSON. I appreciate you having us here today. And thank you, Mr. Chairman.

Mr. DURBIN. Thank you very much.

[The prepared statement follows:]

Council For Rural
Housing And Development

STATEMENT OF THE COUNCIL FOR RURAL HOUSING AND DEVELOPMENT
to the Appropriations Subcommittee on Agriculture

April 21, 1993

The Council for Rural Housing and Development greatly appreciates the opportunity to provide our thoughts to the Subcommittee on funding for rural housing in FY94.

By way of background, the Council for Rural Housing and Development is made up of over 338 member organizations, including 22 state affiliations, of individuals involved in all phases of the Section 515 rural rental housing program. Since our inception in 1980, we have been representing before Congress and the Farmers Home Administration (FmHA) managers, developers, financiers, market analysts, and all others involved in the program.

SECTION 515 PROGRAM FUNDING

The Section 515 program represents a highly successful public-private partnership that exemplifies all the positive that can be done when the government teams up with the private sector to deliver a needed service. Congress created the program in 1962 and since then, these low interest loans have been used to create over 460,000 units of affordable housing serving over one million elderly, handicapped, and low income rural Americans. The program has been very well run; defaults are at less than one percent, a record unmatched by any other federal housing program.

However, a great need for additional housing persists. The Farmers Home Administration currently has on-hand eligible preapplications and applications for rural rental housing totalling over $1.5 billion, close to three times the FY93 appropriations.

President Clinton's FY94 budget proposal increases funding for rural housing overall, but reduces funding of the Section 515 rural rental housing program by $27 million. At the same time, the President's proposal increases the Section 502 single family program by about $600 million. While we understand the fiscal constraints of the present budget deficit, we are troubled by a proposal that appears to benefit needy homebuyers at the expense of needy renters. Clearly, the Section 515 and 502 programs serve two very different groups. Rural rental housing provides homes and shelter to individuals who are not necessarily candidates for homeownership. They may be elderly and have recently made the decision to give up their owned home; they may be handicapped and incapable or unwilling to assume the responsibility of homeownership; or they may be in a period of transition, where homeownership is simply inappropriate. Of great significance, tenants in Section 515 rental housing have significantly less income than Section 502 homeowners. Based on previous FmHA estimates, in 1991 the income of a Section 515 resident was approximately $8,000 while the income of a Section 502 homeowner was $15,900. We hope you will agree that it is not fair to reduce the Section 515 program when other rural housing programs are being increased in funding.

Furthermore, in our current economic situation, it is important to remember that the Section 515 program does more than provide needed shelter. It provides employment,

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attracts business, and creates a lasting community asset. It is truly a program worthy of additional funding under any plan to revitalize the economy.

RENTAL ASSISTANCE FUNDING

The Section 521 Rental Assistance (RA) program is an important component of the Section 515 program in that it provides additional, deep subsidy to very low income residents by providing a 5 year, renewable contract to make up the difference between 30% of a tenant's income and the basic rent required to operate the property ("basic" rent is that which is required to cover general operating expenses, pay the mortgage on a 1% interest rate note, and provide the owner an 8% return on his or her equity, which is currently 3% or 5% of the project cost).

The priority use of rental assistance is for expiring contracts and then for existing projects with rent-overburdened residents. FmHA estimates that in FY93 there is a $65 million funding shortfall of rental assistance to cover expiring RA contracts. This means that approximately 5,500 families will not have the necessary rent supplements to enable them to meet even the basic, low rent of a Section 515 unit. Congress must enact supplemental appropriations for FY93 to cover this shortfall or face the tragic consequences of additional thousands of families once again unable to afford a decent place to live.

For the past several years there has been a failure to recognize the true cost of this very important program. No increases have been provided to it to cover inflationary costs, so that the funds that are meant to cover a five year rental assistance unit are actually covering a shorter time period. In addition, the low income housing tax credit program has targeted even lower income residents who use more rental assistance because the gap between 30% of their incomes and the established rents is greater, resulting again in the expiration of a contract prior to its full five year term. Thus, the need for RA for renewal of expiring contracts has been exacerbated.

The President's budget calls for an increase of $84.1 million in rental assistance to meet the needs of expiring RA contracts. In addition to this, there is a desperate need for servicing RA. A recent survey by FmHA showed that 20.83% of all Section 515 units (or 80,451 units) were occupied by rent overburdened tenants, that is, tenants paying more than 30% of their incomes in rent. This represents a tremendous need for rental assistance on the part of existing residents. We would recommend that the $75 million which President Clinton proposes to be used to fund a voucher program be used instead for servicing Rental Assistance. We have long had concerns about a voucher program for rural areas because the extant housing stock simply does not exist to support a voucher program. Moreover, FmHA does not currently have in place a delivery system for a rural voucher program. It would be a far more efficient use of funds to assist needy residents already living in Section 515 properties through the established RA system. Managers of Section 515 housing are better served by RA than vouchers because RA is project-based and thus allows for easier management and budgeting. The beneficiaries of the assistance are better served with RA because they are guaranteed decent and safe affordable housing. Vouchers could very well be used in substandard housing.

There has been some discussion of providing the Secretary of USDA with the authority to transfer RA from the new construction to the servicing pot. We strongly oppose this. So long as the rural housing program remains targeted to the very low income residents of rural housing, it would be sheer folly to disregard the need for new construction RA. If we do not make such RA available now for newly constructed projects in areas of very low income, we will be facing serious problems of vacant, unaffordable units in the future. The only solution is to make available the legitimate amount of funding that is needed in each category.

REORGANIZATION

Since reorganization at USDA is seen as a cost-saving measure in President Clinton's FY94 budget, we would like to offer some comments on this topic.

We agree that reorganization of the Department will result in significant cost savings. We do, however, have some specific concerns that relate to how the rural housing programs will be administered. We are primarily concerned that:

1) there be adequate staffing levels for the rural housing programs to function properly;
2) neither state rural development councils nor state economic review panels be given jurisdiction over the rural housing programs; and
3) there be no block granting of any of the rural development programs in terms of transferring funds between programs.

While the Administration's FY94 budget shows rural housing as being a part of the Farm Services Agency, it is our understanding that the current thinking is to ultimately roll the FmHA housing programs in to the Rural Development Administration. Since the inception of the Rural Development Administration, we have seen some of the most knowledgeable FmHA employees transfer over to this new Agency to take advantage of career advancement opportunities. While this is perfectly understandable, it has left the rural housing programs understaffed due to recent hiring freezes. The Section 515 program is a sophisticated loan program which requires trained professionals to implement it. We would hope that the FmHA professionals who currently are working in the program will continue to do so under any reorganization plan.

The Council for Rural Housing and Development opposed the transfer of rural housing programs to the Rural Development Administration from the beginning because of two primary concerns. One was that under the RDA in some states, program funding decisions could be made by a state economic review panel, which would review and rank certain rural development program applications. This would effectively delete the competitive point system which currently determines the location of rural rental housing complexes. The current point system ensures that properties are located in areas of greatest need; bypassing this system would undermine the very objectives of this program. We are equally concerned with the jurisdictional authority of the state rural development councils for similar reasons.

In addition, we have always had concerns about the ability of state economic review panels to transfer funds between programs. State and local governments often tend to move funds

where tax bases are enhanced. Housing provides a needed service, but is not a revenue generator. This is one of the main reasons that the provision of affordable housing has historically been a Federal responsibility. Since 1985, the Section 515 program has suffered a serious decline in funding levels, despite the tremendous and continuously growing need that exists for such housing. We are, therefore, very concerned that the funds which are appropriated each year by Congress not be reduced in favor of some other rural development program.

Currently, FmHA state offices have the authority to allocate their apportionment of Section 515 funds within the state on a district-by-district basis. This is especially important in larger states which wish to ensure the equitable distribution of funds within the state. We feel it is important that states continue to have the option to allocate their funds in this manner if they so choose.

A final concern we have for the continued viability of the Section 515 program under any reorganization plan relates to servicing of program loans. We firmly believe that one of the main reasons the program has been so successful is that district offices are located relatively near the complexes that are erected. While most Section 515 properties are managed by professional management companies, there are advantages to having FmHA offices nearby to enable servicing officials to become familiar with the individual properties. The proximity makes it much easier for FmHA and the borrower to identify and resolve any problems that may arise. While the processing of loans could easily be handled in a central state office and, in fact, several states such as Alabama have already moved to centralization of processing, we urge you to maintain servicing officials in the district offices to service the properties and maintain the current high standards of property management.

While we believe that District offices are very important for servicing loans, we also believe there is merit to some supervisory centralization which will serve to guarantee that the program is implemented consistently throughout the state. For that reason, we have long advocated that Multi-family Coordinators be given supervisory authority over District Directors in matters relating to the Section 515 program. They do not currently have such authority.

We would concur that it makes little sense to keep the housing programs with the farm services programs when all other rural development programs are in another Agency. However, we believe the rural housing programs have some unique requirements that do not make them fit naturally with the Rural Development Administration as it now stands. We submit that the most effective way to deliver affordable housing to rural citizens is to recognize these unique requirements and to create a Rural Housing Administration (RHA) with its own set of operative guidelines. Both Agencies would fall within the jurisdiction of the Undersecretary for Small Community and Rural Development. This is one of the few instances where creation of a new Agency would actually *enhance* efficient program delivery.

SUMMARY

The Section 515 program is a successful program that fills a desperate need for housing. The rural rental assistance program plays a vital role in providing additional rental subsidy to the most needy. Both of these programs are underfunded given the existing need. They should be funded at the highest levels possible, using some of the proposed increase in Section 502 funding for the Section 515 program and using the $75 million proposed for the voucher program for additional rental assistance.

CRHD appreciates the Subcommittee's consideration of our testimony. We would be happy to provide you with any additional material or answer any questions.

MPP PROGRAM

WITNESS

ROBERT P. KOCH, VICE PRESIDENT, WINE INSTITUTE

Mr. DURBIN. Mr. Robert Koch of the Wine Institute. Welcome to our subcommittee.

Mr. KOCH. Thank you.

Mr. DURBIN. Again, thank you for your patience.

Mr. KOCH. Thank you, Mr. Chairman.

Mr. DURBIN. Mr. Koch, I do not know if you are aware, but some people believe that a glass of red wine a day is particularly good for your health.

Have you heard this said?

Mr. KOCH. I have heard it said. And a glass of white wine is also good for you. A glass or two.

Mr. DURBIN. A glass or two. Please proceed.

Mr. KOCH. Thank you, Mr. Chairman.

On behalf of the Wine Institute, the industry association representing over 400 California vintners, who produce 80 percent of the wine in the United States, I appreciate this opportunity to speak about the market promotion program. I will not take time extolling the virtues of MPP. I am sure that that has already been done. Rather, I would like to make one point.

We need the market promotion program in order to compete in the world market. The market promotion program and formerly the targeted export assistance program has been instrumental in providing motivational and financial support for the U.S. wine industry, to enable it to compete in foreign markets.

Prior to 1986, the industry exported to only a few markets. The largest market was Canada. Exports consisted predominantly of inexpensive bulk wines. Exports sales in 1985 were $27 million. The industry was faced with significant foreign trade barriers, and the overwhelmingly competitive strength of the wine industries of Europe. It chose to compete for greater market share in the U.S., rather than to seek foreign market entry.

However, with the passage of the Wine Equity Act in 1984 and the priority given the industry in government assistance to reduce foreign trade barriers, the industry began to seek entry to foreign markets. The first allocation of funds through FAS was a very cautious $200,000 in 1985.

From this base, export sales for U.S. wines grew in 1992 to $175.7 million. And the MPP allocation in 1993 for the Wine Institute rose to almost $11.7 million.

In a percent world, the high quality and competitive pricing of our wines would be enough to ensure a considerable share of the world market. In reality though, U.S. wines are facing enormous competition and unfair trade barriers.

In 1992, the European Community subsidized its wine sector to the tune of $2.5 billion. Over $84 million of this went directly toward price subsidies for wine exports. When competing against such artificially low prices, it is virtually impossible for U.S. wines, which must compete without any price subsidies, to establish a foothold in price sensitive markets.

Unfair competition only paints half of the picture. In many of the world's largest markets, we are facing still barriers. Canada imposes steep price mark-ups priced as cost of service charges on our wines, contrary to the U.S.-Canada FTA.

Japan's distribution system confounds even the most determined wine exporter. The European Community continues to mandate burdensome registration and certification requirements.

In the face of such obstacles, it is little wonder that U.S. wines have only scratched the surface of the world wine market. We are not asking for a handout, but only a level playing field on which to compete.

The Wine Institute is proud of the accomplishments it has made thus far without government subsidies. Indeed, we have shown initiative and resourcefulness in dealing with such issues as the phylloxera vine disease, increased competition, a declining domestic market, and a 529 percent federal excise tax increase in 1991.

In order for the U.S. wine industry to continue to thrive, it must build its exports. And for this, we need assistance in combating unfair trade barriers.

The market promotion program has proven itself effective in helping us reach new markets. The 107 individual wine growing companies, who participate in the market promotion program, request that you continue full funding of MPP.

Mr. Chairman, it is a pleasure to be here today, and I am very appreciative of you having me.

Mr. DURBIN. Well, thank you very much for your testimony. I think that it is often overlooked that in the wine industry there are many very small producers, who really need a helping hand, particularly when it comes to export markets.

You made a good argument, I believe, about the fact that if some of our larger producers are going to be competitive in markets overseas competing against the European sources, they may need the assistance of market promotion.

We have tried to focus the resources in this program towards small and medium sized exporters. I do not think that should be exclusive. I think that we should really test these on a case by case basis to determine where the need is most obvious. And I thank you for your testimony.

Mr. Skeen has returned.

Do you have any questions of the Wine Institute?

Mr. SKEEN. I have got a lot of questions, Mr. Chairman. But I just want to thank them for their testimony. I admire the work of the institute and what it has done. I think that it has really put us on the map as far as wine producing, and if we could just make it more marketable. Thank you.

Mr. KOCH. Thank you, Mr. Skeen.

Mr. DURBIN. Thank you for your testimony.

Mr. KOCH. Thank you, Mr. Durbin.

[The prepared statement follows:]

STATEMENT OF ROBERT P. KOCH
VICE PRESIDENT
WINE INSTITUTE

IN SUPPORT OF
THE MARKET PROMOTION PROGRAM

FOR THE HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD & DRUG
ADMINISTRATION, & RELATED AGENCIES

Wednesday, April 21, 1993

INTRODUCTION

The Market Promotion Program, and formerly the Targeted Export Assistance program, has been instrumental in providing motivational and financial support for the U.S. wine industry to enable it to compete in foreign markets. Prior to 1986, the industry exported to only a few markets. The largest market was Canada. Exports consisted predominately of inexpensive bulk wines. Export sales in 1985 were $27 million. The industry, faced with significant foreign trade barriers and the overwhelming competitive strength of the wine industries of Europe, chose to compete for greater market share in the U.S., rather than to seek foreign market entry.

However, with the passage of the Wine Equity Act in 1984, and the priority given the industry in government assistance to reduce foreign trade barriers, the industry began to seek entry to foreign markets. The first allocation of funds through the FAS Cooperator Program was a very cautious $200,000 in 1985. From this base, export sales of U.S. wines grew in 1992 to $174.7 million and the 1993 MPP allocation for the Wine Institute rose to almost $11.7 million.

IMPORTANCE OF EXPORTING

The wine industry is an important employer in California, a state which remains mired in a deep recession. Roughly one of every six unemployed Americans lives in California. Unemployment has been forecast at above 11% for 1993, and is projected to remain above 10% through late 1995.

Wine is also an important product for the agricultural sector. There are over 8,000 grape growers in the U.S., and about half of their harvest is used to produce wine. In 1992, growers received over $900 million for wine grapes. In California, where 90% of U.S. wine is produced, wineries purchased 88% of the 2.1 million ton wine grape crop from independent (non-winery) grape growers.

The 1991 Federal excise tax increase contributed to a decline of 8% in domestic consumption of wine. It is doubtful whether domestic consumption of wine, in the short term, will show any growth. The increase in wine exports has softened the blow of the contraction in domestic consumption. Exports now account for approximately 7% of total domestic production.

Exporting helps offset this decline in domestic consumption by opening up markets that would not otherwise be available for U.S. wines. These export markets help increase sales as well as stabilize U.S. prices for wine grapes and wine products.

NEED FOR CONTINUED SUPPORT

The U.S. wine industry needs the continued support of the MPP for two reasons: 1) it is facing enormous competition, particularly from the EC, and 2) it has only captured a small share of the world market.

a. Our competition

The U.S. wine industry faces competition from over 40 wine producing countries, but primarily from the wine producing members of the European Community who have developed significant subsidy programs to protect local growers and encourage exports.

The EC's budget for production and export subsidies in 1992 approached $2.5 billion. These types of support programs have enabled the EC's wine industry to develop and execute marketing and educational programs around the world for over 50 years. It is little wonder, therefore, that most of the world's wine buyers have sound knowledge and experience with European wines, but are unfamiliar with wines from California.

Regardless of any resolution of the Uruguay Round of GATT, sizeable subsidy programs will continue in Europe to support the wine growing sector. The U.S. industry will continue to play "catch-up" in developing educational and promotional programs.

b. Market share

Although the U.S. wine industry is proud of its progress during the past few years, it has barely established itself in export markets. Given the quality and competitive price of U.S. wines, U.S. wines should be able to capture a much larger share of foreign markets. The following chart lists the current estimated share of the wine market in the major countries where there has been initial success:

Country	1992 Export Sales ($ thousands)	Increase vs. 1991	Estimated Market Share
Canada	44,768	28.1%	13%
U.K.	36,978	31.4%	3.1%
Japan	25,308	0.2%	6.2%
Mexico	6,215	49.3%	19.4%*
Germany	5,966	51.2%	0.1%
Denmark	4,908	20.0%	2.9%
Netherlands	4,591	(7.4)%	1.2%
Belgium	4,468	28.6%	0.8%

* Includes wine coolers. U.S. wines have only 2.2% of the table wine market.

EXPORTING WITHOUT THE MPP

Although export markets currently present opportunities for many U.S. wineries, it is likely that many of these wineries would not export without the aid of the MPP, for two reasons: a) the trade barriers that the MPP was originally intended to combat remain in place, and b) the costs associated with establishing and sustaining a foothold in new markets would prove prohibitive to many wineries without some cost support for promotion programs.

a. Trade Barriers

The MPP was originally established as a means to counter a myriad of unfair trade barriers.

Despite past negotiating efforts of the U.S. Government under the Wine Equity Act and the Uruguay Round, U.S. wine exports continue to face severe market access impediments in major wine markets. Restrictions include but are not limited to:

- o onerous registration and certification requirements in the EC;
- o restrictive distribution practices in Japan;
- o discriminatory price charges in certain Canadian provinces, despite the U.S.-Canada Free Trade Agreement;
- o discriminatory monopoly production and taxes in Taiwan;
- o licensing procedures in Brazil, Chile and Argentina.

The U.S. wine industry receives no production subsidies from the U.S. Government. MPP is not considered a subsidy; rather, it is an export promotion program. No funds from this program may be used to lower the price or cost of the product. As an industry without subsidies, the U.S. wine producers/exporters are at a competitive disadvantage against their foreign competitors – especially the EC, which pumps billions of dollars in subsidies into the wine sector. The MPP allows U.S. wineries to compete in the world market on a more level playing field.

b. Costs of Overseas Marketing

The nature of the industry requires substantial investment in marketing activities (for example, advertising, personal selling and education) for successful foreign market penetration. Wine export promotion efforts include expenses which are not covered by MPP funds (such as travel, overseas sales organizations, and product sampling). Wineries are currently covering all of these additional marketing costs on their own. However, without the MPP, small wineries might not be able to shoulder all of these marketing costs in the short term, even if there might be profits in the long term.

Large companies face a different dilemma. Because large companies target mass markets, exporting demands significant financial investment with considerable risk. Prior to 1986, large companies chose to focus on developing domestic market share rather than facing the riskier export market. MPP funds have encouraged large wineries to seek foreign market share and develop the U.S. industry's international competitiveness.

LARGE COMPANIES AND THE MPP

There are many arguments in favor of granting large companies MPP funds. First and foremost, large company MPP allocations do not take away from the MPP funds available for small companies. Small companies receive their requested allocation provided that their marketing plans and past history in the program qualify for funding. Of the 107 wineries participating in the 1993 program, there are several large companies, many mid-size companies and over 75 small companies. This assortment of businesses mirrors the structure of the industry.

Second, it is important to understand that any winery, large or small, must compete directly against the highly subsidized wine industries of Europe. No American winery can be considered "large" or a dominant force when it competes on foreign soil against the combined might of the EEC wine producers.

Third, large companies establish positions of strength in markets that allow smaller companies to sell under the "California" umbrella. Without the establishment of a mass market for California wines, retailers would not allot the shelf and wine list placement necessary to be a factor in the competitive environment.

Fourth, the American food and beverage industry has created and established brand names that are a major competitive strength. The long-term benefits of brand-name recognition should be realized by allowing the large companies that own these brands to invest in their international development. While the U.S. wine industry has competitive products, it needs to develop a competitive edge in world markets. U.S. wines do not yet have an internationally known presence.

Finally, exports by large wineries translate into markets for many small farmers. Wineries in California own only about 12% of the wine grapes crushed each year; the remaining 88% is purchased under contract from thousands of grape growers. Prohibiting a large company from participating would hurt growers from participating in the export market.

PROGRAM DESCRIPTION

The California wine industry created a program using government export promotional funds that has been, in large measure, the reason for its sales success. The program includes:

* a **generic marketing program** that is now active in 16 countries. This marketing program provides support for wineries to enter new markets by providing information, trade show participation assistance, and opportunities to meet foreign importers, retail buyers, and wine trade media. The generic program also provides information about our industry to the foreign trade in the form of brochures, videos, trade advertising, and seminars. In major markets, retail promotions and consumer events support the sales of wines through the retail trade.

* a **matching funds program** for wineries to support their branded promotion. Wineries receive matching funds for eligible promotional expenses in foreign markets up to their allocated budgets. It is important to note that winery export expenses for product testing and analysis, certification requirements, special labelling requirements, travel, product samples, and administration are not eligible expenses under the program. These types of expenses all must precede market promotion.

This export program requires industry commitment:

* The wineries in the program finance the management and administration of the program by the Wine Institute. The administrative budget in 1993 is $960,000. This is clearly a priority program to the wine industry.

* Wineries must first develop export programs before they can spend promotional dollars. The matching fund aspect of the program assures that funds won't be spent without sound business reasons. Remember, it's the participating vintner's money, as well as the government's.

PROGRAM RESULTS

* Since 1986, U.S. wine export sales have increased over 530% in value. Prior to the implementation of the MPP, U.S. wine exports were stagnant.

* In 1986, only 36 California wineries were involved in exporting. In 1993, there are 107 wineries exporting with the help of the program.

* In 1992, export sales totaled $174.4 million and over 37 million gallons of wine. This is the equivalent of 29,000 acres of wine grapes.

* Exports now account for approximately 7% of total domestic wine production. However, exports now account for more than 20% of the sales of many California wineries.

* Generic marketing activities have expanded to 16 foreign markets. Prior to 1985, there was no generic export promotion.

CONCLUSION

The MPP has allowed the U.S. wine industry to compete on the world market in spite of enormous price subsidies by competitors and trade barriers in market countries. U.S. wine exports have surged since the inception of the MPP in 1986.

Increased wine exports provide direct benefit to the U.S. agricultural sector. U.S. wine exports have grown to the equivalent of 29,000 acres of vineyard production of wine grapes. This acreage represents a value of approximately $306 million.

Additionally, because wine is a value-added product which requires manufacturing and significant marketing investment, increased wine export sales translate into greater U.S. jobs and supporting economic activity.

As a result of TEA/MPP, wineries have developed new overseas marketing efforts. These programs are still in a precarious stage of infancy. With tremendous trade barriers continuing to face U.S. wine exports, even greater U.S. government support is needed to sustain export efforts.

WINE INSTITUTE - EXPORT PROGRAM RESULTS $ MILLION									
FISCAL YEAR:	1985	1986	1987	1988	1989	1990	1991	1992	1993
TEA/MPP FUNDS	-	4.8	2.6	3.0	7.0	9.0	15.0	14.3	11.7
EXPORT SALES	27.6	34.9	60.8	85.3	98.1	125.9	146.1	174.7	-

CONSERVATION PROGRAMS

WITNESS

MAUREEN KUWANO HINKLE, DIRECTOR, AGRICULTURAL POLICY, NATIONAL AUDUBON SOCIETY

Mr. DURBIN. Maureen Kuwano Hinkle of the National Audubon Society.

Did I pronounce your name right?

Ms. HINKLE. Yes, sir.

Mr. DURBIN. Well, wonder of wonders. I have been called a lot of things.

Ms. HINKLE. Most do not even try my maiden name. They just slide over it.

Mr. DURBIN. We have your statement for the record. And we will include it in its entirety. And if you would like, summarize it.

Ms. HINKLE. Thank you. In an effort to honor the time of the day, I will be very brief.

The National Audubon Society appreciates very much the opportunity to present our views to the subcommittee today. We will focus on only four of the many good programs that are authorized in the 1990 Farm Act.

The first is the wetland reserve program, which we are pleased that President Clinton requested full funding at $370 million. And we urge that the reserve be opened up for all states as originally authorized.

I would like to point out that I was told that there are about ten million acres of cropland that is yielding a negative economic return to farmers. This constitutes a very large pool from which farmers can bid into the wetland reserve on a national basis.

We also urge that you appropriate at least $15 million for the water quality incentives program within the ACP budget for fiscal year 1994. This provides incentives for practices that can be put into place in order to protect our water quality.

We also urge that you appropriate President Clinton's budget request of $130 million for the National Research Initiative. We believe that only with long term public research can we make a proper investment in the future of our food supply.

Finally, we urge that any new CRP contracts be dedicated to more enduring practices, such as filter strips, shelter belts, wind breaks, and to cropland that is currently contributing to water quality problems in watershed regions that have been targeted by the 1990 Act.

We are aware of the criticisms by the GAO and by members of this subcommittee that the CRP has delay problems and have not solved them. And we are facing the prospect of the return of much of this land back to original row crop practices.

The practices such as filter strips and cropland contributing to water quality would likely yield the best benefits for the environment. And we urge that you keep this in mind, as you go to work on the appropriations.

Thank you very much.

Mr. DURBIN. In terms of the herbicide Atrazine, can you tell us the danger that it poses to wildlife?

Ms. HINKLE. Atrazine does not pose much impact on wildlife. We do know that it impacts juvenile crustaceans. But the problem with Atrazine is that it does leach, and the use is very high, about 90 million pounds a year. And most of it is in the Great Lakes region. And it has been found in 100 percent of the samples of USGS in 1991 and 1992.

So many water supply agencies have asked EPA to take some preventive action. And they have said that they are reluctant to impose the greater costs on consumers of the water supplies to pay for the clean-up. And they are urging EPA to take preventive action.

The WQIP was originally aimed at farmers who needed an extra incentive in order to protect their water. And we feel that if they were targeted, as well as CRP targeted, to the Great Lakes region, that it would really help the whole Mississippi water basin.

Mr. DURBIN. We have got some new planting practices that are being used in relation to Atrazine, set-backs from water sources. I have been to several farm meetings where that is pretty widely publicized. I hope that has some positive impact.

Ms. HINKLE. I think that the nature of the problem has prompted a lot of constructive and creative responses, including by the major company Ciba–Geigy.

Mr. DURBIN. Thank you very much.

Mr. Skeen.

Mr. SKEEN. Thank you, Mr. Chairman. Just one comment.

Does the Audubon Society promote itself into studies of food stocks near fly-aways such as we have in New Mexico?

We have a real problem with wild fowl feeding off the food stock of farmers and ranchers near wildlife preserves. We have done a lot of work in trying to manage ourselves out of the problem.

Is the Audubon Society involved?

Ms. HINKLE. We are, and we have a fly-way program. And we also own and operate 80 sanctuaries which are dedicated to wildlife conservation. And we cooperate with private landowners, as well as public agencies.

Mr. SKEEN. When you say that you cooperate with private landowners, what do you mean?

Ms. HINKLE. Because our sanctuaries are located in rural areas, then they are neighbors of private landowners. So they want to be able to be good neighbors, and they like to be able to speak to their neighbors. So we do maintain various kinds of cooperative arrangements.

Mr. SKEEN. Cooperative arrangements. That is very good. Because a lot of times, they become deadly enemies of one another. And I think that is counterproductive for the objectives of both interests.

Ms. HINKLE. So far, we have not encountered or have had that kind of a relationship. Hopefully, we will not.

Mr. SKEEN. Hopefully, we do not either. But we were propagating the whooping cranes with the sand hill cranes. And now we have quite a problem for the farming communities, because the birds are cleaning the crops out. So we are trying to come up with a managed system.

Ms. HINKLE. We do have our row sanctuary in Nebraska at the stop-over. We have sanctuaries in Texas, where they winter. And then along the Platt River where they stop. It is their only stopping place on their way to Siberia.

Mr. SKEEN. Does the Society invest in land adjacent to some of these sanctuaries?

Ms. HINKLE. Yes.

Mr. SKEEN. They do?

Ms. HINKLE. Yes.

Mr. SKEEN. Thank you very much.

Ms. HINKLE. Thank you.

Mr. DURBIN. Thanks for your testimony. Your Society does great work. I enjoy your publication, when I get a chance to see it. It is very nice.

Ms. HINKLE. Thank you.

Mr. DURBIN. Thank you.

[The prepared statement follows:]

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STATEMENT of MAUREEN KUWANO HINKLE
DIRECTOR, AGRICULTURAL POLICY
before the
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES
HOUSE APPROPRIATIONS COMMITTEE
April 21, 1993

Mr. Chairman and distinguished members of the subcommittee, the National Audubon Society appreciates this opportunity to testify on appropriations for agriculture for Fiscal Year 1994 (FY 94). National Audubon worked with the authorizing committees in both the House and the Senate to enact the conservation provisions of the 1985 Food Security Act (FSA) and the 1990 Food, Agriculture, Conservation and Trade Act (FACTA). Although there are a number of meritorious conservation programs in both acts, National Audubon's testimony today will concentrate on funding needs for the Wetlands Reserve Program, the Water Quality Incentives Program, the National Research Initiative, and the Conservation Reserve Program.

THE WETLANDS RESERVE PROGRAM

The Wetlands Reserve Program (WRP) is a voluntary, incentives-based program, administered by the ASCS, which pays farmers to restore farmed or prior converted wetlands on their properties to their prior wetland condition, and to protect these and associated lands with long-term or permanent easements. The WRP was authorized with an enrollment goal of one million acres by 1995.

Last year at this time, the subcommittee did not know what level of enrollment demand farmers would demonstrate for the WRP. Over the past several months, however, it has become clear that the agriculture community has shown an extraordinary enthusiasm to participate in the WRP. During the first signup, farmers in the nine pilot states submitted intentions to enroll nearly 500,000 acres into the program—meaning that, in just one signup held in only nine states, there was a potential demand to enroll almost half of the

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program's total five-year, one-million acre goal. Of those lands on which final bids were submitted, 49,888 acres are now in the process of being restored and protected with the $46.057 million appropriated in FY 92.

Some have questioned the WRP because, even given its low funding level, comparatively few farmers were able to participate in the program. However, WRP easements provide either 30-year or permanent protection for enrolled lands. Amortized over the long term, the WRP is a small investment in our precious wetland resources which will yield great benefits for many generations to come.

National Audubon was pleased that President Bush requested $373 million, sufficient to enroll 450,000 acres in FY 94, for the WRP in his outgoing budget. In a clear demonstration of the bi-partisan support for the WRP, President Clinton's budget also requested full funding at $370,260,000 for 450,000 acres in FY 94.

Audubon urges the subcommittee to appropriate funds sufficient to meet President Clinton's request of $370 million, or as close to that request as possible. Audubon further requests that the WRP be opened up to all states, not just the nine pilot states for which funding was authorized in FY 92.

THE WATER QUALITY INCENTIVES PROGRAM

The Water Quality Incentives Program (WQIP) is a voluntary, incentives-based program designed to improve water quality in targeted watersheds where agricultural runoff has been determined to contribute to water quality problems. The WQIP allows participating farmers to enter into 3-5 year contracts to receive financial incentives, cost-share and technical assistance in exchange for developing and implementing nutrient and pesticide management practices which protect water quality.

For FY '92, the first year of operation for the WQIP, the Agriculture Appropriations subcommittees provided $6.5 million for the WQIP, and required the program to be administered through the existing Agricultural Conservation Program (ACP). The $15 million appropriated for the WQIP in FY '93 was also administered through the ACP. **National Audubon supports funding for at least $15 million specifically for the WQIP within the ACP budget for FY '94.**

FACTA (16 USC 3838) states that WQIP payments "shall be in addition to, and not affect, the total amount of payments that such owner or operator is otherwise eligible to receive under this Act." Nevertheless, because the WQIP is administered under the ACP, and ACP rules limit payments to any one farmer to not more than $3,500 per year, farmers now must choose

between receiving WQIP payments and receiving payments for erosion prevention or other practices under the ACP. **National Audubon urges the subcommittee to request that ACP payment limitation rules not apply when farmers who are eligible to participate in the WQIP also have erosion problems that require separate plans and practices.**

In addition, because of appropriations report language, for the past two years agrichemical dealers have been allowed to assist farmers in developing plans for the WQIP. Although Audubon is not aware of problems which have arisen as a result of this policy, conflicts of interests may exist in those cases in which an agrichemical dealer writing WQIP plans has a vested interest in the sale of particular chemicals. **Audubon urges the subcommittee to require chemical dealers or other commercial advisors who develop WQIP plans to disclose to the client farmer and to the USDA whether or not they stand to benefit financially from sale of the products they recommended.**

THE NATIONAL RESEARCH INITIATIVE

The National Research Initiative (NRI) was authorized to provide a substantial infusion of federal funds for agricultural research, to ensure that U.S. agriculture remains both competitive in world markets and responsive to evolving environmental concerns. The NRI will allow USDA to capture the best scientific talent available for multidisciplinary, mission-oriented research, which will be essential for developing applied strategies for a more sustainable agriculture. **Audubon strongly supports President Clinton's FY 94 budget request of $130.2 million for the NRI.**

THE CONSERVATION RESERVE PROGRAM

The Conservation Reserve Program (CRP), authorized by the 1985 Food Security Act, is designed to enroll highly erodible cropland in soil-conserving cover for 10-year contracts. Enrollment in the CRP has reached 36.5 million acres after 12 sign-ups.

Audubon is aware of criticisms made by several members of this subcommittee that the CRP took too much acreage out too fast, that it postpones rather than resolves environmental problems, and that if CRP lands are returned to row crop production when contracts expire, erosion will once again reach high levels. Audubon supported the CRP during the FACTA debate because it targeted highly erodible cropland that should never have been continuously row-cropped, and at a time of record surpluses a ten-year reserve was cheaper than annual set-asides. The CRP reduced overall CCC outlays, while saving an estimated $1.2 billion in wind and water

erosion costs, as estimated by USDA's Economic Research Service (ERS)[1]. In addition, the CRP's benefits for water quality are estimated to be between $1.3 to $3.9 billion over the life of the program. Moreover, ERS estimates of wildlife hunting benefits produced by CRP are in the range of $1.9 to $3.1 billion. Last, but not least, timber stands add yet another economic benefit of the CRP.

President Clinton's budget requests $175 million for new CRP contracts. **Audubon supports the President's FY '94 budget request for the CRP. Audubon also urges the subcommittee to limit new contracts to filter strips, shelterbelts, windbreaks, cropland contributing to water quality problems, and watershed regions targeted by FACTA.** Limiting the new CRP contracts to these practices and regions would ensure that the public investment in CRP lands will yield the greatest possible benefits for the environment. Such contracts are likely to be enduring, benefit specific parts of a farm, and protect soil and water quality.

The need for targeting the CRP to filterstrips in the Great Lakes Region is demonstrated by the two maps included on the next page. The first is a map of the Mississippi River basin monitored by the U.S. Geological Survey (USGS) in 1991-92. As this map shows, the herbicide atrazine was detected in each of 146 water samples collected by USGS along the Mississippi River.[2] The second map shows atrazine use, indicating that the heaviest applications are in the Great Lakes region.[3] CRP filterstrips in the Great Lakes region have a significant potential for reducing pollution of streams, rivers and lakes resulting from agricultural runoff containing pesticides.

The National Audubon Society appreciates the opportunity to present its views to the subcommittee.

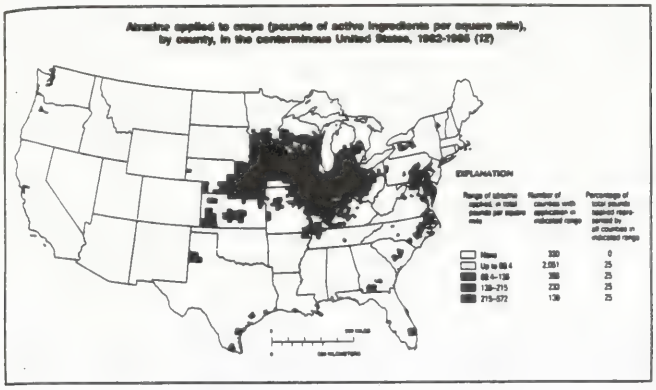
1 Bjerke, Keith, "An Overview of the Agricultural Resources Conservation Program, in The Conservation Reserve--Yesterday Today and Tomorrow, Symposium Proceedings, Jan. 14, 1991, Joyce, L. A., Mitchell, J. E., and Skold, M.D., eds., USDA Forest Service General Technical Report RM-203, May 1991, p. 9

2 USGS Public Affairs Release, Nov. 20, 1991

3 Journal of Soil and Water Conservation, Vol 45, No. 2, March-April 1990, in Groundwater contamination in the United States, by David W. Moody, p. 177



At least one herbicide was detected in each of 146 water samples collected at 8 sites in the Mississippi River basin during April-June 1991, according to the U.S. Geological Survey, Department of the Interior. The herbicide atrazine was detected in every sample and exceeded maximum contaminant levels for drinking water in 27 percent of the samples. The samples were collected during the expected peak concentration season for the farm chemicals.



ORLANDO HORTICULTURAL LABORATORY

WITNESSES

HON. TOM LEWIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

HON. ALCEE L. HASTINGS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. DURBIN. We are joined by our colleagues, the Honorable Tom Lewis and Alcee Hastings of Florida. If you would be kind enough to take seats at the front table. We have advised earlier witnesses that brevity is rewarded. So we will tell you that your entire statement will be included in the record along with audible pauses if necessary. At this point, we welcome you to highlight and summarize your testimony.

Mr. LEWIS. Thank you, Mr. Chairman. We appreciate having the opportunity to testify before the subcommittee on behalf of the project to relocate the United States Department of Agriculture's Agricultural Research Service Horticultural Laboratory from Orlando, Florida to Fort Pierce, Florida. And I ask that my full written testimony be included in the record. And I would appreciate that, Mr. Chairman.

Mr. Chairman, the Orlando Research Lab has been located at 2120 Camden Road since 1952. And due to the extensive growth in that area, the lab finds itself situated in downtown Orlando. Clearly, the type of innovative research necessary for Florida's unique horticultural industry cannot be performed in this antiquated urban laboratory. Therefore, a relocation of the lab has been determined to be beneficial not only to the horticulture industry in Florida, but also to the City of Orlando.

Mr. Chairman, this relocation project will present the ARS with an opportunity to expand the type of research performed in Florida beyond the current capabilities of the Orlando lab.

Subsequently, the research conducted at the Fort Pierce site will find important applications worldwide. In October of 1992, the USDA announced a 720 acre site in Fort Pierce for the relocation. This site selection, which has the support of Florida's horticulture industry, met all of the relocation criteria established by the Agricultural Research Service. And I underscore that, met all of the relocation criteria established by the Agricultural Research Service.

Given this decision and in accordance with fiscal year 1991, appropriations report language providing that planning funds will be considered when an option is selected, we now respectfully request that the subcommittee provide the $3.3 million necessary to begin this project.

Mr. Chairman, thank you again for the opportunity to testify on behalf of this project. Members of the Florida delegation and the Florida horticultural industry are confident that the pieces are in place for us to move forward with the Fort Pierce project.

Mr. DURBIN. Thank you, Congressman Lewis.

Our new colleague, Congressman Hastings.

Mr. HASTINGS. Thank you, Mr. Chairman. I appreciate so very much the opportunity to appear here this evening. I have learned a greater meaning to the work that you, my colleagues, on this Ap-

propriations Subcommittee do, similar to what old farmers used to do sun up to sun down. And I am appreciative to that.

As a supplement to my colleague's, Congressperson Lewis, statement, I would like to add that the proposed site for the USDA Horticulture Research Lab has abundant varieties of food and vegetable crops. And Fort Pierce, where the proposed site is to be, is located within the largest citrus producing county in Florida and in the United States.

In fact, St. Lucie County currently maintains 105,117 commercial acres of citrus. Additionally, the two adjoining counties of Indian River and Martin also maintain sizable citrus acreages exceeding numbers beyond 110,000 acres.

Currently, in St. Lucie, Mr. Chairman and members, there are eleven commercial fresh fruit packing houses, and two citrus processing plants. Also within twenty miles of the proposed site, a total of 31 commercial packaging houses exist, as well as 18 fresh fruit sale agencies.

It has been projected by the economic research directive for the Florida Department of Citrus, a Mr. Robert Bear, that the Indian River citrus producing area accounts for 30 percent of Florida's overall production.

I will include for the record with the Chair's permission a list of fruits and vegetables that will gain valuable benefits from expanded research. These facts support the contention that this district—and let me add that Congressman Lewis has carried all the work on this project. And he has gratefully given me an opportunity, or I am grateful to him for the opportunity, to participate at this level in what we hope will be the closure of this particular matter.

As there exists a great need for the services of the Orlando Horticulture Laboratory in this unique location, Mr. Chairman, I ask that the subcommittee honor this request to proceed with the relocation process. The agricultural industry recognizes the opportunities that lay ahead with this proposed expansion project, and we all look forward to working with this subcommittee on this matter.

Thank you, Mr. Chairman, for allowing me to speak before the subcommittee today. And I ask that my full statement be included in the record.

Mr. DURBIN. It will be included.

Mr. DURBIN. And I thank you for the letters of support from your delegation. Mr. Peterson as well will certainly be interested in this come mark-up of the bill.

Are there any members of the delegation of either party who opposes this relocation?

Mr. HASTINGS. There is. I defer to my colleague.

Mr. LEWIS. I think that there is one member who is opposed to it. I received a letter from him the other day, Mr. Mica from Orlando. I also feel that there may be another member who is wavering. But the majority of the members that I have talked to over the past year support the relocation. Actually, the City of Orlando does not want this any longer. Since 1952, it has outgrown the four acre site, and is a problem to the city.

And as I mentioned earlier, the relocation site meets all of the criterion at the request of the ARS.

Mr. DURBIN. We were impressed by the number who signed. And I just wondered if it was unanimous.

Mr. LEWIS. It is close.

Mr. DURBIN. Close. It is hard to get anything unanimous around here.

Mr. Skeen.

Mr. SKEEN. Especially in large delegations. We are glad to have you both here. I have had an intense interest in this project, because I was handling it through the Appropriations Committee for Andy Ireland when he was here. It had to be moved out of Orlando, because they wanted the property back. The property I think is very valuable.

I am happy to see that it is continuing on, and that you have got pretty widespread support.

Mr. LEWIS. Yes, sir.

Mr. SKEEN. I think that it is very important that you get this thing moved and get it reconstructed and back in business. So I appreciate your efforts. And if there is any way that we can help, we are here to do it.

Mr. LEWIS. Well, quickly, it is going to broaden the whole scope of horticultural research for not only Florida, but for the entire country. And it will probably be one of the master ARS stations within the country.

Mr. SKEEN. Well, the center of the citrus production is no longer situated around Orlando.

Mr. LEWIS. That is correct.

Mr. SKEEN. It is further south.

Mr. LEWIS. As my colleague explained, this is right in the center. St. Lucie County is the highest citrus producing county in the country for area. And Indian River and Martin County are second, just to the south and slightly to the west.

Mr. SKEEN. How far south is that from Orlando?

Mr. LEWIS. About 75 miles.

Mr. SKEEN. 75 miles.

Mr. LEWIS. Maybe 80 miles. And because of the problems that we have had with citrus, the center of production has moved south of State Road 60, which is right across the center of the state. The heavy freezes of the early 1980s wiped out the citrus industry in the Orlando area and the Lakeland area, particularly.

Mr. SKEEN. I happened to have traveled through that area, and was astounded at the fact that it does not exist from that line north.

Mr. LEWIS. That is right.

Mr. SKEEN. Thank you very much.

Thank you, Mr. Chairman.

Mr. DURBIN. Thanks for your testimony.

Mr. HASTINGS. Thank you, Mr. Chairman.

Mr. LEWIS. Thank you, Mr. Chairman.

[The prepared statement follows:]

STATEMENT

Of

THE HONORABLE TOM LEWIS

Of Florida

Before the

HOUSE APPROPRIATIONS SUBCOMMITTEE

ON

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION

AND

RELATED AGENCIES

April 21, 1993

Mr. Chairman, I appreciate having the opportunity to testify before the Subcommittee on behalf of the project to relocate the United States Department of Agriculture (USDA) - Agricultural Research Service (ARS) Horticultural Laboratory from Orlando, Florida to Fort Pierce, Florida.

The Orlando research lab has been located at 2120 Camden Road since 1952. Due to the extensive growth in the area, the lab finds itself situated on a four acre site surrounded by commercial buildings and a city cultural park. The type of innovative research necessary for Florida's unique horticultural industry cannot be performed in this antiquated urban laboratory. The ARS has stated, "Innovative research depends upon availability of modern facilities, to solve complex problems through the application of advanced research approaches." This relocation project will give the ARS an opportunity to conduct this type of innovative research which will provide benefits not only to Florida, but world-wide.

The ARS has worked hand in hand with Florida's Horticultural Coalition Workshop Group to expand research capabilities at the Fort Pierce site. This proposed expansion is especially important to the horticultural industry as it looks towards the future and the myriad of complex challenges that it faces.

For example, new technologies must be developed to produce environmentally sound alternatives for chemicals scheduled for phase out. For instance, the post-harvest fumigant Methyl Bromide is scheduled to be phased out in the near future. This fumigant is widely used in Florida on a variety of fresh fruits and vegetables. To date, no safe or economically viable alternative has been registered. The Fort Pierce facility will expand the scope of research which may ultimately provide growers with a safe alternative to chemicals like Methyl Bromide.

The expansion of horticultural research in Florida will assist the state in taking an innovative role in land and water management systems to protect the environment, biological controls of insects and plant pests, improved production systems for citrus, vegetable, nursery and ornamental crops, and more efficient marketing systems for all horticultural crops bound for domestic and expanding export markets. Subsequently, the research conducted at the Fort Pierce site will find important applications world-wide.

In October of 1992, the USDA announced Fort Pierce as the site for the relocation of the lab. The 720 acre site will be leased at no cost from the University of Florida which has an adjacent research facility. The site selection, which has the support of Florida's horticultural industry, met all the relocation criteria established by the ARS.

The fiscal year 1993 appropriations conference report provided $1.27 million to be divided among three relocation projects, Orlando, California, and France. Given the USDA's 1992 decision regarding lab relocation to Fort Pierce, and in accordance with fiscal year 1991 Appropriations Report Language providing that, "planning funds will be considered when an option is selected," I respectfully request that the Subcommittee provide the $3.3 million necessary to begin this project.

For the benefit of the Subcommittee, I have included letters of support for the relocation project which have been signed by members of the Florida Congressional Delegation. I ask that these be made part of the record.

Mr. Chairman, thank you again for the opportunity to testify on behalf of this project. Members of the Florida Delegation and the Florida Horticultural Coordinating Group are confident that the pieces are in place for us to move forward with the Fort Pierce project. We look forward to working with the Subcommittee on this important matter.

Congress of the United States
House of Representatives
Washington, DC 20515

The Honorable Richard J. Durbin
Chairman
House Agriculture Subcommittee
of the Committee on Appropriations
2362 Rayburn House Office Building
Washington D.C. 20515

Dear Chairman Durbin:

We are writing today in support of $4 million in full planning funding of the relocation of the United States Department of Agriculture - Agricultural Research Service Horticultural Research Facility in Orlando, Florida to Fort Pierce, Florida.

Relocation of the Orlando ARS laboratory is vital to the research needs of Florida's diverse $4.31 billion horticultural industry. Efforts to relocate the current lab, currently situated on a four acre site in downtown Orlando have been underway since 1986. The current lab, built in 1952, is now surrounded by commercial buildings, rendering it unable to provide the level of horticultural research neccesary to meet Florida's growing needs.

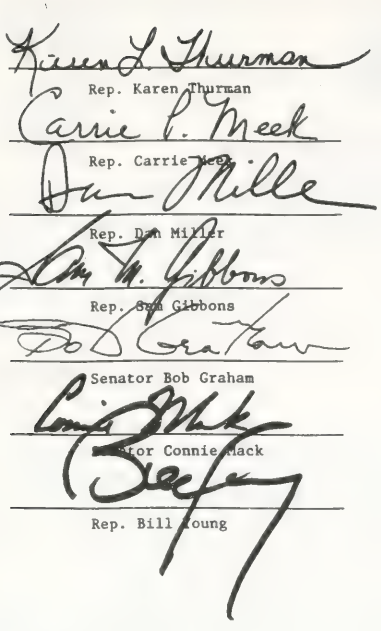
This high priority project continues to receive overwhelming support from Florida's agricultural industry, represented by the Florida Horticultural Coordinating Group. The Florida Horticultural Coordinating Group was established to coordinate site selection for relocation to best serve the needs of Florida's horticultural industry.

In October of 1992, the U.S.D.A. announced the 720 acre site in Ft. Pierce, Florida as the final site selection for the ARS facility. In accordance with Fiscal Year 1992 Appropriations language, which stated that planning funding would be considered when a site was chosen for relocation, we now request that full planning funding for relocation of the Orlando ARS research facility.

Sincerely,

Tom Lewis
Rep. Tom Lewis

Rep. Alcee Hastings



Rep. Karen Thurman

Rep. Carrie Meek

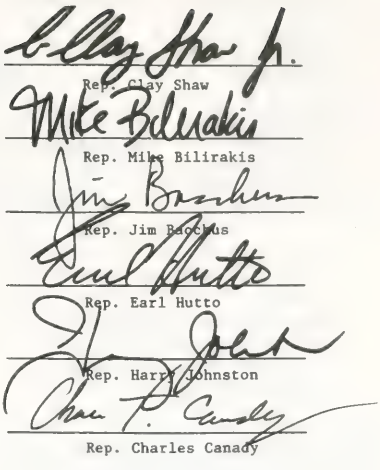
Rep. Dan Miller

Rep. Sam Gibbons

Senator Bob Graham

Senator Connie Mack

Rep. Bill Young



Rep. Clay Shaw

Rep. Mike Bilirakis

Rep. Jim Bacchus

Rep. Earl Hutto

Rep. Harry Johnston

Rep. Charles Canady

TOM LEWIS
16TH DISTRICT, FLORIDA

ROOM 2351
RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
TELEPHONE: (202) 225-5792
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COMMITTEE ON AGRICULTURE
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

SELECT COMMITTEE ON NARCOTICS ABUSE AND CONTROL

NORTH ATLANTIC ASSEMBLY (NATO)

DISTRICT OFFICES:
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4440 PGA BOULEVARD
SUITE 406
PALM BEACH GARDENS, FL 33410
(407) 627-6182

PORT ST. LUCIE
7501 SOUTH U.S. HIGHWAY ONE
SUITE 200
BARNETT BANK BLDG.
PORT ST. LUCIE, FL 34952
(407) 283-7989
(407) 465-3710

Congress of the United States
House of Representatives
Washington, D.C. 20515

March 18, 1993

The Honorable Richard J. Durbin
Chairman
House Agriculture Subcommittee
of the Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Durbin:

You are recently in support of a letter from fifteen members of the Florida delegation in support of $4 million in full planning funding of the relocation of the Unites States Department of Agricultural - Agricultural Research Service Horticultural Research Facility in Orlando, Florida, to Fort Pierce, Florida. Since that time several additional members of the delegation have expressed their support of the relocation, and we wanted to inform the Committee of their support.

Relocation of the Orlando ARS laboratory is vital to the research needs of Florida's diverse $4.31 billion horticultural industry. This high priority project continues to receive overwhelming support from Florida's agricultural industry, which is represented by the Florida Horticultural Coordinating Group.

In October of 1992, the USDA announced the 720 acre site in Ft. Pierce, Florida as the final site selection for the ARS facility. In accordance with Fiscal Year 1992 Appropriations language, which stated that planning funding would be considered when a site was chosen for relocation, we now request for full planning funding for relocation of the Orlando ARS research facility.

Sincerely,

Rep. Tom Lewis

Rep. Alcee Hastings

Rep. Ileana Ros-Lehtinen

Rep. Cliff Stearns

THIS STATIONERY PRINTED ON PAPER MADE WITH RECYCLED FIBERS

THE FLORIDA HORTICULTURAL COORDINATING GROUP

April 14, 1993

The Honorable Richard J. Durbin, Chairman
Subcommittee of the Appropriations Committee
for Agriculture, Rural Development, FDA, and
Related Agencies
2362 Rayburn House Office Bldg.
Washington, D. C. 20515

Dear Chairman Durbin:

The members of the Florida Horticultural Coordinating Group, representing the growers and packers of horticultural commodities in the state (citrus, vegetables, tropical fruits, ornamental nurseries, foliage and others) request your support to obtain funding for the expansion and relocation of the U.S.D.A.-ARS Horticultural Laboratory which is currently located in Orlando.

U.S.D.A.-ARS has selected a relocation site adjacent to the Agricultural Research and Education Center at Ft. Pierce. At a meeting of the Florida Horticultural Coordinating Group on February 10, 1993, the members agreed to enlist your support for the necessary funding to carry out the relocation and expansion of the laboratory at the Ft. Pierce site.

Florida is second only to California in the value of its horticultural industry as determined by farm gate value. In 1991 the farm gate value of horticultural commodities in Florida was $4.31 billion. The uniqueness and diversity of the horticultural industry in Florida and its importance to the economy of the State warrants the increased support of U.S.D.A.-ARS research facilities.

Initial funding for a portion of the planning costs was contained in the Fiscal Year 1992-93 appropriation budget. The current effort is directed toward full funding of the planning monies (approximately $4.0 million) in the 1993-94 Fiscal Year budget process.

We sincerely appreciate your assistance in this important effort for Florida agriculture. Comprehensive horticultural research is essential to the health and well being of agriculture in our state.

If you need additional information, please contact any of the undersigned.

FHCG
April 15, 1993

Bobby F. McKown
Florida Citrus Mutual

Jackie Fauls
Highlands County Citrus Growers Assn.

J. T. Griffiths
Citrus Growers Associates

Earl Wells
Florida Nurserymen and Growers Assn.

Douglas Bournique
Indian River Citrus League

Richard Kinney
Florida Citrus Packers Assn.

Erroll Fielding
Citrus Production Managers Assn.

Carl B. Loop, Jr.
Florida Farm Bureau Federation

Michael J. Stuart
Florida Fruit & Vegetable Assn.

ALCEE L. HASTINGS
23d District, Florida

Congress of the United States
House of Representatives
Washington, DC 20515-0923

STATEMENT OF THE HONORABLE ALCEE L. HASTINGS
of Florida

Before the
HOUSE APPROPRIATIONS SUBCOMMITTEE ON
AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG
ADMINISTRATION AND RELATED AGENCIES

I APPRECIATE THE OPPORTUNITY TO BE HERE THIS EVENING TO EXPRESS MY SUPPORT FOR THE RELOCATION OF THE ORLANDO HORTICULTURE LABORATORY TO FORT PIERCE, FLORIDA. I WOULD LIKE TO COMMEND YOU, MR. CHAIRMAN, AS WELL AS THE OTHER SUBCOMMITTEE MEMBERS, FOR YOUR FINE WORK AND COMMITTMENT TO FACILITATE THE RELOCATION OF THE ORLANDO HORTICULTURE LABORATORY.

THE CONGRESSIONAL DISTRICT I REPRESENT, DISTRICT 23, IS IN EAST CENTRAL AND SOUTHEAST FLORIDA, AND EXTENDS TO THE EASTERN COASTLINE ALONG THE ATLANTIC OCEAN. AT PRESENT, DISTRICT 23 WILL SERVE AS AN IDEAL SITE FOR THE RELOCATION OF THE ORLANDO HORTICULTURE LABORATORY.

THE U.S. HORTICULTURAL RESEARCH LABORATORY WAS REESTABLISHED IN ORLANDO IN 1935. THE LABORATORY WAS ORIGINALLY BUILT IN 1952, AND HAS SINCE OUTGROWN ITS 4-ACRE SITE. THE RELOCATION PROJECT OFFERS 720 ACRES THAT WILL PROVIDE A MORE MODERNIZED AND SPACIOUS LABORATORY IN COMPARISON TO THE OUTDATED FACILITY IN ORLANDO.

THE PROPOSED SITE FOR THE U.S.D.A. HORTICULTURE RESEARCH LAB HAS ABUNDANT VARIETIES OF FRUIT AND VEGETABLE CROPS AND FT. PIERCE IS LOCATED WITHIN THE LARGEST CITRUS PRODUCING COUNTY IN FLORIDA AND THE UNITED STATES. IN FACT, ST. LUCIE COUNTY CURRENTLY MAINTAINS 105,117 COMMERCIAL ACRES OF CITRUS. ADDITIONALLY, THE TWO ADJOINING COUNTIES OF INDIAN RIVER AND MARTIN ALSO MAINTAIN SIZABLE CITRUS ACREAGE EXCEEDING NUMBERS BEYOND 110,000 ACRES.

CURRENTLY, IN ST. LUCIE COUNTY THERE ARE 11 COMMERCIAL FRESH FRUIT PACKINGING HOUSES AND 2 CITRUS PROCESSING PLANTS. ALSO, WITHIN 20 MILES OF THE PROPOSED SITE A TOTAL OF 31 COMMERCIAL PACKAGING HOUSES EXIST, AS WELL AS 18 FRESH FRUIT SALES AGENCIES. IT HAS BEEN PROJECTED BY DR. ROBERT M. BEHR, THE ECONOMIC RESEARCH DIRECTOR FOR THE FLORIDA DEPARTMENT OF CITRUS, THAT THE INDIAN RIVER CITRUS PRODUCING AREA ACCOUNTS FOR 30% OF THE STATE'S OVERALL PRODUCTION. I WILL INCLUDE FOR THE RECORD A LIST OF FRUITS AND VEGETABLES THAT WILL GAIN VALUABLE BENEFITS FROM EXPANDED RESEARCH.

THESE FACTS SUPPORT THE CONTENTION THAT DISTRICT 23 IS TRULY A UNIQUE LOCATION FOR HORTICULTURAL COMMODITIES. AS THERE EXISTS A GREAT NEED FOR THE SERVICES OF THE ORLANDO HORTICULTURE LABORATORY, MR. CHAIRMAN, I ASK THAT THE SUBCOMMITTEE HONOR THIS REQUEST TO PROCEED WITH THE RELOCATION PROCESS. THE AGRICULTURAL INDUSTRY RECOGNIZES THE OPPORTUNITIES THAT LIE AHEAD WITH THIS PROPOSED EXPANSION PROJECT AND WE ALL LOOK FOWARD TO WORKING WITH

THE SUBCOMMITTEE ON THIS MATTER.

THANK YOU MR. CHAIRMAN FOR ALLOWING ME TO SPEAK BEFORE THE SUBCOMMITTEE TODAY, AND FOR YOUR CONSIDERATION OF MY REQUEST.

Table 1. Estimated total Florida grapefruit production by marketing district.[a]

Season	Indian River[b]	Interior[c]	Total[d]
	million boxes		
1991-92	36.2	23.3	59.5
1992-93	37.8	24.5	62.3
1993-94	39.5	25.8	65.3
1994-95	41.1	27.0	68.0
1995-96	42.5	28.0	70.5
1996-97	43.6	28.9	72.6
1997-98	44.5	29.8	74.3
1998-99	45.2	30.4	75.7
1999-2000	45.8	30.9	76.8
2000-01	46.3	31.3	77.6

[a]For white seedless, red and pink seedless and seedy grapefruit combined.

[b]Annual tree plantings equal to 468,000 in 1989-90 through 1991-92, 234,000 in 1992-93 and 1993-94, and 117,000 thereafter.

[c]Annual tree plantings equal to 359,000 in 1989-90 through 1991-92, 179,500 in 1992-93 and 1993-94, and 89,750 thereafter.

[d]Rows may not add up due to rounding.

Table 2. Projected round-orange production for Brevard, Indian River, Martin, Okeechobee, Palm Beach, St. Lucie and Volusia counties, 1992-93 through 2001-02 seasons; based on Indian River tree yields.

Season	Early and Midseason[a]	Valencias[b]	Total Region
	million boxes		
1992-93	16.5	15.6	32.1
1993-94	17.2	16.4	33.6
1994-95	18.0	17.4	35.4
1995-96	18.7	18.3	37.0
1996-97	19.3	19.1	38.4
1997-98	19.9	19.9	39.8
1998-99	20.4	20.5	40.9
1999-2000	20.8	21.0	41.8
2000-01	21.1	21.5	42.6
2001-02	21.2	21.8	43.0

[a]Annual tree plantings equal to 238,000 in 1992-93 and 1993-94 and 119,000 thereafter. Tree yields equal to the four-season (1985-86 through 1988-89) average for Indian River early and midseason oranges. Loss rates were assumed to be 2.5% per year.

[b]Annual tree plantings equal to 359,000 in 1992-93 and 1993-94 and 179,500 thereafter. Tree yields equal to the four-season (1985-86 through 1988-89) average for Indian River Valencia oranges. Loss rates were assumed to be 2.5% per year.

Estimated vegetable acreage and value in East Central, Everglades, & Southeast Florida (1990-91)

Vegetable Crop	Acreage	Value ($)
Snap bean	15,800	36,577,000
Cabbage	6,050	16,379,000
Cucumber	6,800	35,666,000
Eggplant	1,000	7,228,000
Bell pepper	6,300	57,886,000
Potato	4,900	19,492,000
Squash	5,750	26,766,000
Tomato	11,200	126,118,000
Watermelon	12,700	32,187,000
Sweet corn	27,650	54,083,000
Celery	6,250	32,368,000
Total	104,400	444,750,000



SUSTAINABLE AGRICULTURE

WITNESS

JOHN HABERERN, PRESIDENT, RODALE INSTITUTE

Mr. DURBIN. One of our witnesses has a plane to catch. Since we are running late, we will move him up on the schedule. I would offer this to anyone else who is in the same situation. Dr. John Haberern of the Rodale Institute, if you would like to join us.

Mr. DURBIN. I think you've heard our drill here.

Mr. HABERERN. I will try to make it short. I really appreciate getting me on the docket so I can make my plane. I have to be in Philadelphia tomorrow at 8:30 for some testing in the hospital. But thank you very much and I really appreciate, Mr. Chairman and Congressman Skeen, the opportunity to represent Rodale Institute to talk about two issues which are really dear to my heart, at least. One of them is compost and I'll leave you something to remind you of my testimony, a little thing that we have put together. The inscription says compost happens. I'll leave that here. And secondly, I'd like to address the need for a national training center to train extensions agents in sustainable agriculture. As you know, more and more farmers across the country and I guess across the world, I would say, that farmers are turning to sustainable agriculture practices and more and more research is being done on sustainable agriculture within USDA and private non profits like Rodale and even large agrichemical companies like DuPont and ICI Americas.

Now, I'm not talking about organic farming. What I'm addressing is the way farming is done so that our natural resources are not only conserved but they're also enhanced and regenerated. It's really a good thing that's happening. But as you also know, farmers today, face many problems. They are facing continuing problems of profitability and competitiveness but they're also confronted with environmental problems. They need to produce food and fiber in ways that focus on water quality, soil erosion, pesticide residues, worker health and safety. While we're making good progress to help these farmers and to help consumers who are crying out for food free of pesticide residues and foods which will help them prevent disease, I think there's one thing that's missing and that's is the type and breadth of information on sustainable agriculture which will help farmers really move up the learning curve on sustainable agriculture practices.

One farmer, like Mark Raber, from Illinois, who farms 800 acres of corn, soybeans, oats and sweet corn, and I quote Mark when he says, "We need to use more federal money to fund extensions to promote sustainable practices. Extension isn't doing it now." In the past, extension has done quite a good job in educating and giving information to farmers.

However, in the 1990 farm bill, Congress recognized a need to better train extension personnel in sustainable agriculture practices and authorized the sustainable agriculture technology development and transfer programs in Chapter 3, subtitle B of the 1990 farm bill at an annual funding level of $20 million.

However, this program has not received any funding to date. Yet, I think farmers are anxiously awaiting more information on sus-

tainable practices. We are pleased that President Clinton has requested $3 million for the extension service for the sustainable agriculture in his fiscal 1994 budget request. My request is that this funding go through Chapter 3 of subtitle B of the farm bill to provide training in sustainable agriculture for extension agent.

Thus, we are requesting a fiscal 1994 appropriation of at least $8 million to be divided evenly among four already established sustainable agriculture research and education regions to create regional training centers with regional directors and state sustainable agriculture coordinators within each region. The regional center will be located in existing facilities so there is no need for funds for bricks and mortar.

I'd like now to talk about composting, an opportunity to help solve many of our solid waste problems. With urban development hinging on agriculture land, composting is becoming a viable option to manage manures and municiple waste together. We call it co-composting.

Rodale, as you know, has a long history of composting research and education. We also have a long history of working with the agriculture research service and we would like to expand that excellent relationship and work together on viable waste management options.

Both the House and Senate reports are copying your fiscal years 1992 and 1993 included language directing USDA to undertake composting research and education as authorized in section 1456 of the farm bill. However, that bill has provided no specific funding levels for this important research.

I'm here this year to request $350,000 for research on composting and co-composting urban and rural waste at the Rodale Institute Research Center specifically with ARS. What we are looking to do with this money is to determine what can be composted, to determine if it's environmentally safe and to determine the agronomic and economic benefits to the farmers of this material on cropped lands.

I've had many meetings with the former ARS administrator and present acting assistant Secretary of Science and Education, Dr. Dean Plowman. He agrees that such research is urgently needed in view of the increased amounts of rural and urban waste streams being generated with no appropriate process technology concerning their use on agriculture and urban lands.

In addition to farmers, the citizens of our country will benefit from this research through cost savings and waste recycling methods and decreased reliance on solid waster landfills.

In closing, I would like to thank the members of this subcommittee and other members of the House of Representatives who have been so supportive of sustainable agriculture. I hope that we can count on you for continued support and especially for the $8 million for cooperative extension training centers idea and the $350,000 for the agriculture research service composting program in cooperation with Rodale Institute. Thank you very, very much.±

Mr. DURBIN. Thank you. Several of them we've addressed in previous appropriation bills and I'll note that the President has included some in his budget request. We'll be keeping a close eye on

those and we agree with your conclusions on sustainable agriculture.

Mr. HABERERN. I will leaving this for your desk.

Mr. DURBIN. We'll be adding things to that along the way. Mr. Skeen?

Mr. SKEEN. Mr. Chairman, I think composting has said it all. Thank you.

Mr. HABERERN. You're welcome.

Mr. DURBIN. Thank you for joining us.

Mr. HABERERN. You're welcome.

[The prepared statement follows:]

STATEMENT OF

John Haberern
President
Rodale Institute

to the
House Committee on Appropriations
Subcommittee on Agriculture, Rural Development,
FDA, and Related Agencies

April 21, 1993

Mr. Chairman and members of this subcommittee, I am John Haberern, President of the Rodale Institute, a nonprofit agricultural research, demonstration and education organization located in Emmaus, Pennsylvania. I appreciate this opportunity to testify to the need for funding a Sustainable Agriculture Technology Development and Transfer Program through the U.S. Department of Agriculture's Cooperative Extension Service. In addition, I am also requesting funding for composting research through the U.S. Department of Agriculture's Agricultural Research Service.

As you are aware, American farmers are the most productive in the world. However, they face many problems today which threaten the future viability of farming. They face continuing problems of profitability and competitiveness and are also confronted with the need to produce food and fiber in ways that focus attention on water quality, soil erosion, pesticide residues, worker health and safety, and other environmental concerns.

Our agricultural researchers continue to yield an extraordinary array of scientific information and technology that has made our farmers very productive. However, emerging knowledge of potential long-term effects on the environment and human health associated with some agricultural practices, coupled with concerns for sustainability and viability suggests the need for new research and information priorities.

SUSTAINABLE AGRICULTURE TECHNOLOGY DEVELOPMENT AND TRANSFER PROGRAM - COOPERATIVE EXTENSION SERVICE

In the 1990 Farm Bill, Congress authorized the development of research and education programs that will promote sustainable agricultural production systems and practices. As part of these programs, Congress recognized the need to better train Extension personnel and authorized the Sustainable Agriculture Technology Development and Transfer Program in Chapter 3 of Subtitle B, Chapter XVI at a funding level of $20 million per year.

Since passage of the 1990 Farm Bill this program has not received any funding. Thus, we were pleased that President Clinton has

requested $3 million for the Extension Service for sustainable agriculture in his FY 1994 budget request.

State Extension Service Directors, as well as farm, crop, livestock, sustainable agriculture, consumer and environmental organizations agree that there is a great need to provide this training. It is rare for these diverse groups to support and endorse the same programs, yet there is broad agreement that the Extension Service needs to be strengthened to provide the assistance described in Chapter 3. Extension agents and agricultural professionals must be better prepared to provide the knowledge and educational programs needed by American producers.

The environmental challenges facing American farmers and ranchers will continue to increase in the coming years. Extension agents have exclusive "grass-roots" networks to facilitate technology transfer among farmers and ranchers, which enable them to successfully respond to a competitive market and environmental and natural resource challenges. However, these agents must be trained themselves. It is imperative that we move quickly and expeditiously to provide training for these agents and facilitate the transfer of available technologies.

Since the inception of the Rodale Institute and the Institute's Research Center, we have been working directly with thousands of farmers and extension agents across the United States. Our main thrust is to help them with information and research to explore production options which are profitable, yet have a positive effect on the environment and the natural resource base. Our work started years ago and we are active participants in USDA's Sustainable Agriculture Research and Education Program (SARE). In addition, the publisher of our New Farm magazine has recently been appointed to the Secretary's National Sustainable Agriculture Advisory Council. I have been appointed to the Secretary's Agricultural Science and Technology Review Board.

From the beginning farmers told us that even though they wanted to try new systems and technologies, they could not get the information. Or that it was not in a format that was practical and easy to apply to their operation.

Farmers like Mark Graber, who farms 800 acres of corn, soybeans, oats and sweet corn in Delavan, Illinois said, "We need to use more federal money to fund Extension to promote sustainable practices. Extension isn't doing it now."

And farmer Vaughn Edwards with 400 acres of corn, soybeans and wheat in Terre Haute, Indiana said, "we've got a lot of information on cover crops and the like at universities that could be used to help sustainable farming systems. Some of that information is starting to get out. But it is just not getting applied."

What can we do to get more of the sustainable agriculture research findings to farmers? Well, we had several positive meetings with Dr. Johnsrud, Administrator of the Extension Service, concerning the need for training for Extension personnel.

Thus, we are requesting an FY 1994 appropriation of at least $8 million for a National Training Program in Sustainable Agriculture as authorized in Chapter 3 of Subtitle B of the 1990 Farm Bill. This funding would be divided evenly among the four already established Sustainable Agriculture Research and Education Regions to create a Regional Training Center with a regional director and state sustainable agriculture coordinators within each region. The regional centers will be located at existing facilities so that no funds will have to be appropriated for facility construction.

These Regional Training Centers will become regional locations for extension education on sustainable agriculture, drawing on the research knowledge of the various agencies in the USDA involved in sustainable agriculture, state agriculture experiment stations, private and public research and educational organizations, and the practical experience of farmers especially those cooperating in on-farm research and demonstration projects. The centers will provide education and training in sustainable agriculture for extension personnel, experiment station researchers and other professionals involved in education and transfer of technical information. The goal will be to develop an understanding, competency, and ability to teach and communicate the concepts of sustainable agriculture among farmers and others they serve. The training of trainers is the output on which the success of the program will ultimately depend.

It is imperative that funding for Chapter 3 begin as soon as possible in order to meet the requirement in the 1990 Farm Bill that all agricultural agents of the Cooperative Extension Service complete a sustainable agriculture training program by 1995; all new Extension agents are required to complete the training within 18 months of employment. In addition to Extension agents, training will be provided to appropriate field office personnel from the Soil Conservation Service, the Agricultural Stabilization and Conservation Service, and other professionals.

COMPOSTING RESEARCH - AGRICULTURAL RESEARCH SERVICE

Composting has become increasingly attractive as a viable waste management option, due mainly to landfill closures and to water pollution from urban and agricultural runoff and leachate. With urban development impinging on agricultural land, composting is becoming a viable option for managing manures and municipal wastes together.

However, the Agricultural Research Service has not conducted research on the practicability and feasibility of co-composting selected fractions of rural and urban waste streams. It is possible that on-farm composting may contribute to ground water and surface water pollution, with nitrates and other solubles. Thus, farmers and other policy makers are forced to make their decisions without this critical information.

Both the House and Senate reports accompanying your fiscal years 1992 and 1993 Agriculture Appropriations included language directing USDA to undertake composting research and education as authorized in Section 1456 in the 1990 Farm Bill. However, the bills provided no specific funding levels for this important research. I am here this year to request $350,000 for research on composting and co-composting urban and rural wastes at the Rodale Institute Research Center.

I have been meeting with former ARS Administrator and presently Acting Assistant Secretary for Science and Education, Dr. R.D. Plowman, and he agrees that such research is urgently needed in view of the increased amounts of rural and urban waste streams being generated with no appropriate process technologies for their safe and beneficial use on agricultural and urban lands as soil conditioners and biofertilizers. In a January 30, 1992 letter to Senator Specter, he states that "ARS will seek to strengthen our research in this area as resources permit...."

At the Rodale Institute Research Center, we are now building a state-of-the-art farm-scale composting research and demonstration facility. This facility, the only one to our knowledge in the United States, will be used to evaluate various farm-scale compost-making methods and techniques, to assess the feasibility of composting various mixtures of wastes, and to monitor the composition of leachate from experimental composting systems under controlled conditions.

In view of the many potential environmental and agronomic benefits to be gained through co-composting of urban and rural wastes, and subsequent utilization of the compost, scientists at the Rodale Institute Research Center are requesting the $350,000 to work cooperatively with Agricultural Research Service scientists on a composting research project, the objectives of which are:

1. To identify compatible combinations of rural/urban wastes for composting;
2. To establish the operational parameters necessary to co-compost specific rural/urban wastes;
3. To establish through field compost utilization trials the environmental safety of co-composted materials; and

4. To establish both the agronomic and economic benefits to be derived from users of composted materials on cropped lands, or as farm salable products.

In addition to farmers, the citizens of our country will benefit from this research through cost savings in waste disposal by the development of safe and effective waste recycling methods and decreased reliance on solid waste landfills. The production of high quality composts will help to ensure a publicly acceptable, economically viable, and an environmentally sound program.

In closing, I would like to thank the members of this Subcommittee and the other members of the House of Representatives who have been so supportive of the Sustainable Agriculture Research and Education (SARE) program funded through the U.S. Department of Agriculture's Cooperative State Research Service. I hope that we can continue to count on your support for the SARE program, for an additional $8 million for the Cooperative Extension Service's Sustainable Agriculture Technology Development and Transfer Program authorized in Chapter 3 of Subtitle B of the 1990 Farm Bill, and for an additional $350,000 for the Agricultural Research Service's Composting Research Program.

AGRICULTURE PROGRAMS IN WASHINGTON STATE

WITNESS

HON. NORM DICKS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. DURBIN. From the state of Washington, a respected colleague, member of the powerful subcommittees on Defense and Interior, a friend of this subcommittee and a really great American, the Honorable Norm Dicks.

Mr. DICKS. Well, Mr. Chairman, I want to first of all say thank you very much. This committee has been very kind to the people of the state of Washington over the years—this is a long day for you, and I'll try to be brief.

I wanted you to know, by the way, that agriculture and forestry together are the largest industry in Washington state, 400,000 people. They produce $3.6 billion annually in agriculture. We're the nation's largest producer of apples, sweet cherries, hops, lentils, dry peas, spearmint oil and raspberries and over the years, federal assistance has meant a lot to these efforts.

Today, I want to talk about two critical programs this subcommittee has supported in previous years. At the University of Washington's Center for Competitiveness of U.S. forest products, CINTRAFOR, and Washington State University's study on the International Competitiveness of Agriculture Products, IMPACT. CINTRAFOR would continue research that focuses on technical, economic and environmental culture barriers impeding U.S. forest products competitiveness on new technologies, processes and policies that will provide U.S. products with competitive advantages. IMPACT'S work this year would relate to the development of solutions to the economic and technical barriers which are currently affecting the international trading competitiveness of agricultural products, and we're asking for a total of $800,000 for both programs in fiscal year 1994 to fund continuing studies concerning trade barriers as well as research into new products that provide a competitive advantage.

I want to express my appreciation for the committee's past support of the animal disease biotechnology facility at the College of Veterinary Medicine at Washington State University. By the way, that's not in my district, Mr. Chairman, that's in Mr. Foley's district.

Mr. DURBIN. Whose?

Mr. DICKS. Mr. Foley, the Speaker. The committee provided $2.12 million last year to begin site construction with $11.5 million needed from the CSRS building fund in 1994 to keep the facility on schedule for a 1995 completion.

Research at the facility would include pathogen detection such as the recent E. coli outbreak in my state that was fatal to a constituent in my district. This would help in looking for ways to detect that deadly bacteria.

I also extend my gratitude to the subcommittee which has been very supportive in past years of a number of CSRS research grant programs. I encourage you to support last years level for these re-

search programs and there are a number of them listed in my statement.

And finally, Mr. Chairman, I just want to say that if I could have my statement put in the record, I appreciate the support you've given and I know that this is your first year as Chairman and look forward to working with you and supporting your subcommittee's work and know that this is a challenging time for you and Mr. Skeen with the cutbacks and overall funding for domestic programs.

Mr. DURBIN. Thank you, Mr. Dicks and I might tell you that I believe you have taken the first prize from the pork busters in the number of projects in your state named by them. We are doing our best to educate our colleagues on how important Ag research is. We hope these colleagues of ours who have been critical of it will learn a little bit during this session about the importance of this research to our economy.

Mr. DICKS. We'll certainly have to try to explain it to them on the floor and prior to the time we get to the floor.

Mr. DURBIN. Do you have apples in your district?

Mr. DICKS. Yes, I do. My mother has a tree in her back yard. But it's over in Speaker Foley's district and Jay Insley's district.

Mr. DURBIN. I just wanted to mention that on our trip to Mexico, we were surprised to find what a positive impact Washington apples have had in Mexico.

Mr. DICKS. Right. Well, we sell them everywhere. We're trying to get into Japan. If you have any leads, we need a little help over there.

Mr. DURBIN. We'll work on it.

Mr. DICKS. All right, thank you, Mr. Chairman.

Mr. DURBIN. Mr. Skeen?

Mr. SKEEN. I have nothing, Mr. Chairman, except to say that we appreciate your help in continuing education in agriculture on the floor.

Mr. DICKS. We'll do our best to help and we also appreciate Mr. Foster's help over the years too.

Mr. SKEEN. Thank you.

[The statement follows:]

Statement of Rep. Norm Dicks
To the Subcommittee on Rural Development &
Agriculture Appropriations
April 21, 1993

Thank you, Mr. Chairman. I appreciate the opportunity to testify before your subcommittee this afternoon regarding many of the important agriculture programs in Washington state. The commitment of this subcommittee to the rural and agricultural needs of the United States has helped farm families all across America, and certainly we in Washington state are extremely grateful for your interest and for your support.

In Washington, agriculture is the state's leading industry. More than 400,000 people are employed in jobs related to agriculture or forestry. Washington farmers produce $3.6 billion annually in agricultural products and we are increasingly exporting to foreign markets, a very positive factor in our balance of trade. Washington is now the nation's largest producer of apples, sweet cherries, hops, lentils, dry peas, spearmint oil, and raspberries. Federal assistance in research has been a vital part of the development and growth of all of these industries, and continuing this level of effort is critically important to sustain them, and helping them to grow.

I am here today to ask the subcommittee's assistance on several items which are of a high priority in Washington state during fiscal year 1994:

Two critical programs that this subcommittee has supported in previous years are the University of Washington's Center for International Competitiveness of U.S. Forest products (CINTRAFOR) and Washington State University's study on the International Competitiveness of Agricultural Products (IMPACT). CINTRAFOR would continue research that focuses on technical, economic, environmental, and cultural barriers impeding U.S. forest products competitiveness and on new technologies, processes, and policies that will provide U.S. Products with competitive advantages. IMPACT's work this year would relate to the development of solutions to the economic and technical barriers which are currently affecting the international trading competitiveness of agricultural products. We are asking for a total of $800,000 for both programs in FY 1994 to fund continuing studies concerning trade barriers as well as research into new products that provide a competitive advantage.

I want to express my appreciation for the committee's past support of the animal disease biotechnology facility at the College of Veterinary Medicine at Washington State University. The committee provided $2.12 million last year to begin site construction, with $11.5 million needed from the CSRS building fund in FY 1994 to keep the facility on schedule for a 1995 completion. Research at the facility would include pathogen detection such as the recent E.coli outbreak in my state.

I also extend my gratitude to the subcommittee, which has been very supportive in past years of a number of CSRS special research grants. I encourage you to support last year's levels for these research programs. Most important to the Pacific Northwest are potato research, barley gene mapping, TCK smut of wheat research, the food and environmental quality laboratory, hop research, Solutions To Environmental and Economic Problems (STEEP II), Russian wheat aphid research, alternatives to dinoseb, and cool season legume research.

One of the strengths of agriculture in the Pacific Northwest has been the cooperation among the states within our region. I urge your support of the tri-state and multi-state efforts in this region, including the grain legume genetics and physiology research unit located at Washington State University, the potato varietal development committee, the International Northern Forest Organization, the Northwest Center for Small Fruits Research and the Northwest Nursery Crops Research Center.

Finally, Mr. Chairman, I urge your continued support for the regional aquaculture centers. U.S. demand for seafood has increased seven-fold since 1975, and aquaculture can certainly help America meet a swiftly growing requirement. But there is still a significant amount of research to be done, and I hope the subcommittee will maintain its support for these important regional centers.

Mr. Chairman, I deeply appreciate all of the assistance you have provided to the agriculture community in Washington state and throughout the nation. Food production is vital to our state's economy, and Washington's export markets overseas have clearly helped to reduce the nation's trade deficit. With your continued help, Washington can maintain its competitive position. Thank you for your assistance.

NORTHWEST INDIAN TRIBAL CLAM AND OYSTER ENHANCEMENT PROPOSAL

WITNESS

MERLE JEFFERSON, NORTHWEST INDIAN FISHERIES COMMISSION AND LUMMI INDIAN NATION

Mr. DURBIN. Billy Frank Jr. of the Northwest Indian Fisheries Commission didn't think he'd ever get called. Is he here?

Mr. DICKS. He's representing Mr. Frank.

Mr. DURBIN. Are you going to speak for Mr. Frank?

Mr. JEFFERSON. Yes.

Mr. DURBIN. And your name?

Mr. JEFFERSON. Merle Jefferson.

Mr. DURBIN. Oh, well, you're the next one on the list. Merle Jefferson of the Lummi Indian Business Council. Thank you for joining us here and waiting so patiently. We're going to put your entire statement in the record and if you would like to highlight it for us at this point, we'd sure appreciate it.

Mr. JEFFERSON. I'll try to make it short as possible.

Thank you, Mr. Chairman and the committee. My name is Merle Jefferson. I'm the director for the natural resources for the Lummi Nation is located on the northwest coast of Washington state and I appreciate the opportunity to present testimony before this subcommittee on behalf of the 20 Indian tribes in western Washington state.

I would like to present my written statement for the record and summarize my presentation.

Mr. DURBIN. It will be included.

Mr. JEFFERSON. Right. The American Indian tribes in western Washington state have depended on an abundance of seafood in Puget Sound and costal waters, beaches, tidelands, for thousands of years. We have traditionally harvested salmon, shellfish for subsistence, cultural and commercial purposes.

In our treaties with the United States that were negotiated in the mid 1800s, we specifically reserved the right to harvest fish and shellfish from our usual and accustomed waters, tidelands and inland waterways.

Over the last century, once the bountiful shellfish resource has seriously declined due to industry and residential development as well as man-made pollution. Today, over one-third of the tidelands have been closed to shellfish gathering by Washington state Department of Health. Our tribal people have depended on these resources and are becoming more increasingly alarmed at the sharp decline of the shellfish species and acceptable habitat areas. We are now working aggressively with the state of Washington to address these problems with pollution.

I appear here before the committee today to request your financial assistance to help our tribes replenish the tidelands, beaches, waterways with traditional shellfish species. We request the fiscal year 1994 appropriations of $540,000 to be added to the U.S. Department of Agriculture Rural Development Administration Industrial Development Grant and Account.

This is the second time our 20 tribes have approached this committee to seek funds for this purpose. We need your help and believe our purposed approach is the most logical, cost effective, environmental beneficial and potential economic revitalization of important Pacific northwest industry.

We propose to modernize a 20-year-old shellfish hatchery on the Lummi reservation and operate this facility to produce an adequate supply of shellfish seed for the northwest tribes to develop their own shellfish programs.

We also hope to initiate research and development efforts to utilize scientific research findings and our existent facility to provide technical assistance to improve regional shellfish production, restore tidelands to shellfish productivity, test the possibility for a profitable shellfish business ventures with annual operation support from agricultural department. We could expand our production and technical system capabilities to meet the needs of west coast shellfish industries.

In conclusion, this appropriation request will help vitalize the declining treaty-protected shellfish natural resources in the Pacific northwest, create employment opportunity for tribal members and help improve both the regional environmental and the economy.

Your committee assistance will help us to restore the treaty-protected shellfish resource for the benefit of both Indians and non-Indians and contribute to the economy of the Pacific northwest. And thank you for your consideration.

Mr. DURBIN. Mr. Jefferson, have you pursued this idea, economic development idea with any other agency, state or federal, to see if there are available funds?

Mr. JEFFERSON. Well, I've been doing that today. I went to the Science Foundation and different areas but this last year someone told me to try here, so, I'm trying here.

Mr. DURBIN. Well, we're glad to have you and we appreciate you coming by to see us and your patience. I was just curious as to perhaps whether some Rural Development Administration office or other office might be able to provide funds.

Mr. JEFFERSON. I've been looking for other sources of funds. That's why I came last week and this week because I've been looking for other resources.

Mr. DURBIN. Are you going to be here tomorrow?

Mr. JEFFERSON. I'll be leaving tomorrow at 11:00.

Mr. DURBIN. Well, maybe before you leave, one of the staff people can give you some contacts with the Rural Development Administration. They might have some ideas of agencies you can contact as well. I'm not ruling it out but I'm saying that perhaps in the area of economic development, there might be some agencies that could be of assistance to you. And I'm not even familiar with the programs in the Bureau of Indian Affairs and whether or not they would be helpful as well.

Who is your Congressman? Do you know off hand?

Mr. JEFFERSON. Swift.

Mr. DURBIN. Congressman Al Swift?

Mr. JEFFERSON. Yeah.

Mr. DURBIN. Well, he's certainly a friend of this subcommittee. We'd be happy to work with him on that. Have you contacted his office?

Mr. JEFFERSON. Yes, I've been all around.

Mr. DURBIN. Sounds like you've made the rounds.

Mr. JEFFERSON. Yeah, right.

Mr. DURBIN. Well, thank you, you've come a long way and you've been very patient waiting to testifying. If you'll contact the staff about the RDA they will provide information on that agency.

Mr. JEFFERSON. Is there any key staff I should contact?

Mr. DURBIN. That one right there.

Mr. JEFFERSON. Right.

Mr. DURBIN. He's as key as they get. Thank you for coming. Mr. Skeen?

Mr. SKEEN. Well, thank you Mr. Chairman. Mr. Jefferson, is that reservation on the Olympic peninsula. How far from Port Angeles?

Mr. JEFFERSON. It's about an hour and a half from Seattle north. It's about a half hour from the Canadian border.

Mr. SKEEN. It's not on the peninsula?

Mr. JEFFERSON. Yeah, it is.

Mr. SKEEN. Oh, it is.

Mr. JEFFERSON. It's straight off—about seven miles west of Bellingham.

Mr. SKEEN. Besides that, you're a good fisherman. You've been testing the water all over Washington.

Mr. JEFFERSON. Oh, yeah.

Mr. DURBIN. Thanks for joining us.

Mr. SKEEN. Thank you, sir.

[The prepared statement follows:]



Northwest Indian Fisheries Commission

6730 Martin Way E., Olympia, WA 98506 Phone (206) 438-1180

Testimony of Merle Jefferson, Director
Department of Natural Resources, Lummi Indian Nation
Before the
House Agriculture Appropriations Subcommittee
Regarding the
FY94 Appropriations for the
U.S. Department of Agriculture

April 21, 1993

Request: An appropriation increase of $540,000 in the USDA Rural Development Administration, Industrial Development Grant Program for the Lummi Nation to renovate an existing shellfish hatchery, operate the hatchery in FY94, provide technical assistance to Tribal governments and the shellfish industry of Puget Sound and Western Washington State to revitalize shellfish production for economic development and employment purposes. This Project request is supported by the Northwest Indian Fish Commission, the fisheries management coordinating body for the twenty Tribal governments in Western Washington State, the Washington State Departments of Fisheries and Health, and the private commerical shellfish industry. We firmly believe the Department of Agriculture has a trust responsiblity to assist Tribes in the management of their treaty-protected resources as confirmed in the USDA American Indian Policy Statement.

BACKGROUND: Northwest Indian Tribal Clam and Oyster Enhancement Proposal

On the ocean and along the inland waters of Washington State, Indians have depended on rich varieties of seafood for a thousand generations. An estimated 93 species have been traditionally harvested by the Indians in western Washington, including clams, oysters, snails, abalone, barnacles, shrimp, crab, sea anemones, squid and octopus. Shellfish were taken year round whenever they were accessible. Major Indian gatherings often coincided with the most suitable tidal period and large amounts of shellfish were cured for winter stores and trading. In addition to their direct use of fish and shellfish, Tribes engaged in commercial bartering with other Tribes and with the growing population of non-Indians.

Along with the influx of new settlers came confrontation. These confrontations culminated in a series of treaties that reserved Tribal rights to harvest shellfish, fisheries and wildlife resources. The twenty western Washington Tribes, served by the Northwest Indian Fisheries Commission (NWIFC) were signatory to these treaties and exercise shellfish rights. These Tribes include: Hoh, Jamestown S'Klallam, Lower Elwha S'Klallam, Lummi, Makah, Muckleshoot, Nisqually, Nooksack, Port Gamble S'Klallam, Puyallup, Quinault, Quileute, Sauk-Suiattle, Skokomish, Squaxin Island, Stillaguamish, Suquamish, Swinomish, Tulalip, Upper Skagit.

Today, Tribes still utilize shellfish for ceremonial and subsistence and depend upon commercial shellfish activities to bolster reservation economies.

Western Washington Tribes, and non-Indian communities are confronted with serious decline in the once-abundent shellfish industry. The foremost of these problems is pollution and loss of adequate intertidal gathering areas. The Tribes have joined with the State and the shellfish industry to aggressively reduce effects of pollution and prevent further losses. There is a critical need, however, to enhance the shellfish resources that are presently available to Tribal managers, especially for clams and oysters. This proposed project will further Tribal and State interests in the shellfish industry by establishing a central Tribal shellfish hatchery for culturing clams and oysters for use in Tribal shellfish enhancement programs on western Washington State tidelands.

PURPOSE:
Congressional appropriations in FY94 of $540,000 to renovate and operate a Lummi Indian Nation shellfish hatchery for the Department of Agriculture's Rural Development Administration, Industrial Development Grant Program. Essentially, this proposed appropriation would establish a Northwest Tribal Technical Assistance initiative through the Lummi Nation to revitalize the economic capabilities of the Tribal shellfish industry in Washington State by providing a source of clam and oyster seed to assist rehabilitation of Tribal tidelands

APPROACHES:
The Lummi Nation has several assets which make it a logical choice as a center to create a self-sufficient Tribal shellfish industry, including: (1) an operating shellfish hatchery with the potential to produce an amount of clam and oyster seed adequate to support a developing Tribal shellfish production economy; (2) abundant tidelands which are suitable for testing a number of techniques for shellfish bed enhancement under demonstration project conditions; (3) a 750-acre seawater impoundment area suitable for experimenting with shellfish nursery requirements; and (4) access to a staff of experienced shellfish culturists and biologists.

Seed Production and Distribution: The Lummi Nation operates an 11,000 square foot shellfish hatchery which has the capacity to produce four billion clam and oyster larvae annually with the improvements requested through this FY94 appropriation. Substantial shellfish hatchery renovations will be required. The existing hatchery was constructed more than 20 years ago and has been operated at a subsistence level for the past several years. Capital improvements needed to increase the production capacity include a greenhouse, algal rearing tanks, pumps and centrifuges and other necessary modernizations to capitalize on advancements in shellfish production. We are hopeful for Agriculture Department continued operational support in the future to further enhance western Washington shellfish. After Tribal needs are met, it is anticipated that seed and larval sales to non-Indian enterprises will help off-set operations costs.

The proposed plan of operation will include an annual strategy meeting by the Northwest Tribes to set ratios of clam to oyster production and to arrive at a seed/larval distribution plan for the current year. Production and setting of oyster larvae and production of clam larvae will take place in the Lummi Nation's facility. Seed oysters and clams will be distributed to other Northwest Tribes according to the mutually determined distribution plan.

The seed production and distribution would directly benefit 10-20 Northwest Tribes who have primary rights to harvest shellfish since it would provide a foundation for grow-out opportunities within the Tribe's Usual and Accustomed harvest areas. It would also create 400-600 jobs. Different production and distribution plans would be developed as previously indicated. The following estimates provides an example of potential production capacity:

PRODUCTS	QUANTITY	DISTRIBUTION
Oysters		
1. Bags of seed (on Tribal furnished cultch)	22,222 bags	10 Tribes @ 2,222 bags
2. Larvae for remote set	1,000,000,000	10 Tribes @ 100,000,000
Clams		
3. Clam larvae	1,000,000,000	10 Tribes @ 100,000,000
OR Set and Grown to plant @ 2-15 mm size	50,000,000	10 Tribes @ 5,000,000
4. Clam larvae for remote set	1,000,000,000	10 Tribes @ 100,000,000

Technical Assistance: Successful clam bed management depends on a number of interacting factors including having appropriate substrate, suitable feed conditions, adequate larvae for recruitment, and good water quality. Although the importance of each of these factors has been investigated on an individual basis, there is a need to evaluate the interaction of these factors at a demonstration project level. This is a necessary step in building credibility for venture capital which Northwest Tribes will require to build a self-sufficient industry. The diverse tidelands on the Lummi Reservation and at other Tribal reservations offer a unique opportunity to conduct demonstration project level studies that will be necessary to evaluate these factors on economies of scale regarding production capabilities.

The Lummi Nation also has a 750-acre seawater impoundment which offers unique technical assistance opportunities for the shellfish industry. Originally constructed in the late 1960's for the purpose of rearing pan-size salmon and adult oysters, the seapond has

been used for net-pen rearing of coho salmon for delayed release and is now a natural "incubator" for oyster and Manila clam larvae. Conceptually, the seapond approach to shellfish production has many distinct advantages including higher densities of food production, greater control of temperature regimes, protection from storm damage, and an ability to avoid short-term pollution events.

Conclusion: We believe this appropriations request to renovate and operate an existing shellfish hatchery to benefit western Washington shellfish growth and productivity is a most cost-effective, logical approach to revitalizing the shellfish industry, create employment opportunities, and offer technical assistance utilizing existing facilities to improve knowledge and capabilities in this field.

FY94 Proposed Lummi Nation Shellfish Project Budget

SHELLFISH HATCHERY CAPITAL IMPROVEMENT

LINE ITEM	BUDGET YR 1
Fiberglass Tanks (13)	$65,000.00
Seawater Pump	$6,000.00
Heat Exchangers (2)	$11,500.00
Ozone Treatment	$12,000.00
Centrifuge	$7,500.00
Rearing Boxes (12)	$7,200.00
Upwelling Floats	$20,000.00
Algae Lamps (20)	$13,000.00
Fiberglass Greenhouse	$72,000.00
Upgrade Boilers	$10,000.00
Hoist	$5,000.00
Fork Lift	$7,000.00
Truck (20 Ton)	$15,000.00
Immersion Heaters	$4,000.00
Filters	$15,000.00
Air Blower	$8,000.00
Sub-total Capital Improvement	**$278,200.00**

OPERATIONS BUDGET

Salaries	
Manager (1FTE)	$40,000.00
Biologist/Bacteriologist (1FTE)	$27,400.00
Algae Culturist (1FTE)	$22,880.00
Shellfish Technicians (4FTE)	$54,080.00
Sub-Total Salaries	**$144,360.00**
Fringe Benefits (22%)	$33,202.80
Utilities	$19,737.20
Repair & Maint. (Equip)	$8,500.00
Facility Expenses	$7,500.00
Supplies	$27,000.00
Technical Consulting	$20,000.00
Travel	$1,500.00
Sub-total Operations	**$261,800.00**
TOTAL PROGRAM	**$540,000.00**

AGG-APPR.TST(Merle/324)

INTERTRIBAL AGRICULTURE COUNCIL

WITNESS

ROBERT MILLER, PRESIDENT, INTERTRIBAL AGRICULTURE COUNCIL

Mr. DURBIN. Robert Miller of the Intertribal Agricultural Council.

Mr. MILLER. Mr. Chairman, members of the committee, thank you for inviting us. I am Robert Miller, President of the Intertribal Agriculture Council, Member of the Creek Nation from Oklahoma. This is my colleague, our secretary, Calvin Wandeross Batsu Tribe, South Dakota.

We presently have 57 dues-paying member tribes in our organization from all over the United States and Alaska, and they represent about 44 million acres of the 54 million acres in trust to the United States government.

We have several concerns here and they're outlined in this proposal. I'll just touch on them very briefly. One of our concerns is that we would like to see the restoration of the funding for newly started reservation extension programs and we have—currently we're funded at 1.75 million and have 34 agents on the ground in some 20 states on Indian reservations.

It would require about $8 million to fully fund the reservation service to all of the Indian population in the United States and of course that's what we would like to see happen.

Secondly, we'd like to see the implementation of the consolidated office that were provided in the 1990 Farm Act bill that consolidated offices of the USDA, implemented all over Indian country to bring the Indian farmer and rancher to equity with the non-Indian farmer and rancher.

Also, we're concerned about the $67 million cut in the conservation program and we understand that it's going to the CRP program and the wetland program which are good programs but we think it's very important that we perform conservation on the lands that support us economically and feed us. So, we hate to see those cuts made in the conservation program.

Thirdly, the land acquisition program, Indian land acquisition program, the authorization was raised from 2 to 8 million in the 1990 Farm Act. We'd love to see that funded so that the Indian tribes might better preserve their homelands.

Lastly, and I told you I'd be very brief, we're—the outreach program for socially disadvantaged farmers and ranchers that was spoken to earlier today, we're in support of that program. We think that it would be—help to implement those programs through our community-based colleges and community colleges.

If you have any questions, I brought Calvin along to answer them for me. So, if you have any questions, well, we'd certainly be happy to try to answer them.

Mr. DURBIN. I noticed that the budget request from the President doesn't include money for extension services on Indian reservations, which you have testified is needed.

Mr. MILLER. Vitally important to the Indian folks. We've had some 75 requests for extension service on the reservation.

Mr. DURBIN. What kinds of requests? What kinds of activities do you need help with?

Mr. MILLER. Primarily in the youth activities, you know, boy's club and so forth, yes.

Mr. DURBIN. Okay. Well, thank you very much.

Mr. MILLER. Of course, that's a vital—excuse me.

Mr. DURBIN. Go ahead.

Mr. MILLER. That's a vital link in bringing the farmer and rancher to the other USDA programs as well.

Mr. DURBIN. Mr. Skeen?

Mr. SKEEN. Thank you, Mr. Chairman and I'm very interested in what you're saying about the extension service. Do you not have an agreement with a land grant college or one of your agricultural colleges in your area?

Mr. MILLER. Yes, we're working through the land grant colleges with this particular program.

Mr. SKEEN. With this program?

Mr. MILLER. Yes, sir.

Mr. SKEEN. And extension work?

Mr. MILLER. Yes. If I may, Mr. Chairman, the proposals that are put together here, are put together by the tribes but they have to come in in cooperation with the state land grant school. And so the proposal come into extension service, extension service selects the proposal and funds them. The extension agents are full time employees of the extension service and the tribes contribute dollars and the federal dollars are also in there. Every dollar of this program so far—every federal dollar has 37 cents, so far, of tribal money matching it, 41 cents of state money matching it. So, everybody's involved in this proposal that comes in.

Mr. SKEEN. What you're concerned about is it's not in the President's budget?

Mr. MILLER. No, sir, it never has been. Every year, Congress put it in the 1990 FACT Act and it's never been in the budget. Congress has been kind enough to us, in this committee, to keep us funded every year in increasing funding.

Mr. SKEEN. Thank you very much.

Mr. MILLER. Mr. Skeen, I think probably one of the things you were trying to get at in that question was why isn't there an extension program provided for Indian folks. Is that——

Mr. SKEEN. No, I used to work with BIA.

Mr. MILLER. Oh, I see.

Mr. SKEEN. I understand the BIA, for a while, ran its own extension service. But now you're working in cooperation with the land grant universities and their extension departments. I think it's far more efficient to handle it as it is now than under the old system.

Mr. MILLER. Yes, sir, that's it.

Mr. SKEEN. What I an concerned about is are we trying to retrogress and go back to the old system.

Mr. MILLER. No, no, we're not, no.

Mr. SKEEN. Very good.

Mr. MILLER. Thank you.

Mr. SKEEN. Thank you, you cleared up a lot of doubt in my mind. Thank you for your testimony.

Mr. MILLER. Thank you very much for having us.

[The information follows:]

Intertribal Agriculture Council

100 North 27th Street, Suite 500, Billings, Montana 59101-2054 (406) 259-3525

Prepared Statement of the Intertribal Agriculture Council on the 1994 Budget for the Department of Agriculture Prepared for the House Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration and Related Agencies, April 21, 1993.

The Intertribal Agriculture Council (IAC) is an organization of dues paying member Indian Tribes who together control 44 million acres, or 81 percent of the 54 million acres held in trust by the United States for Indian people. The IAC is governed by a Board of Directors composed of elected tribal representatives from each of the twelve regions of Indian Country reflecting the diverse character of Indian Agriculture.

We have three main areas of concern on the proposed 1994 budget for the Department of Agriculture, which are: 1) restored support for the newly started Reservation Extension Agent program, 2) implementation of the Indian Reservation Consolidated Sub-office provisions of the 1990 FACT Act and protection of important land conservation programs, 3) use of authorization levels for the Indian Land Acquisition Program under the Farm Loan Programs, and 4) implementation of Section 2501 of the Food, Agriculture, Conservation and Trade Act of 1990 (FACT Act) to support community outreach and the Tribally Controlled Community Colleges. Each of these three topics is treated below.

1. Cooperative Extension Service.

Reference: Title XVI - Research, Subtitle H - Miscellaneous Research Provisions, Section 1677 - Reservation Extension Agents, FACT Act of 1990.

Cooperative Extension Service Agents serve in the critical role of community liaison to all USDA and Land Grant University Agriculture Programs, supervise youth activities such as 4-H, and coordinate special training programs such as food storage techniques, nutrition, and subsistence gardening. For the past several years the Intertribal Agriculture Council has worked with the Department of Agriculture to enhance Indian participation in Extension Service programs as a cornerstone to improving USDA/Indian relations.

The Indian Reservation Extension Agent program is authorized in Section 1677 of the 1990 FACT Act, and spearheads the improving USDA involvement with American Indian communities. We in the IAC are proud of our participation in the effort to establish this critical Reservation

Extension Agent program and are very disappointed that the Department recommends deleting all funding from this extremely successful and cost effective program for the third consecutive year.

Coupled with authorizations in the 1990 FACT Act, the Congress made clear its support for this vital undertaking to improve services to the first Americans by appropriating one million dollars in the 1991 budget (at the same time the FACT Act was being debated). As a result of that authorization and appropriation, the Cooperative Extension Service, working in concert with Indian Tribes and State Extension Directors, implemented a program which in its first year resulted in the establishment of 13 fully operational Reservation Extension Projects, with a total of 34 staff, half of which were American Indians. In addition, each dollar of Federal seed money attracted $0.37 in Tribal Government support, and $0.41 in State Government support. States and Tribes hired nine individuals, in addition to the extension personnel, to assist in these projects. In the first year of this program one American Indian was reached by the Extension Service for every $11.86 of appropriated federal moneys.

Despite this extremely productive use of the start-up funds the department deleted the fledgling program from its FY 1992 budget request. But Congress recognized the value, reinstated the initial $1.0 million and added another $500,000 to increase expansion and development in 1992. The Department again dropped this valuable and successful program from its budget request for FY 1993, and again Congress showed its support by appropriating $1.75 million, an increase of $250,000 over 1992 levels.

Again, as the Department of Agriculture submits its budget request for 1994, the IAC has come to Congress to request that they override the Department's continuing efforts to scrap this important and valuable program. With only a total of only $1,610,000 after the Department withheld its overhead, 34 extension programs are providing valuable and formerly unavailable services to Indian Communities in 20 states from Florida to Alaska. Contributions from the States and Tribes (in lieu of County support) cannot be reported at this time due, in part, to the ongoing transition in administration. However it's probable that the non-federal portion of the funding in 1993 follows the same pattern as in 1992.

We are informed by administrators of the Extension Service that the response by the States and Tribes to this program continues to be overwhelming. In the first six months the Extension Service received more than 75 proposals submitted jointly by cooperating States and Tribes to provide Extension services to the Indian communities. These cooperative proposals totaled more than 16 million dollars. The awarded programs for 1993 funding include new programs costing $419,000, from a budget increase of only $250,000. More than $1.5 million in necessary, well-documented and well-developed State proposals were rejected for funding in 1993 due to a lack of budget dollars. This level of need and interest by both

the Tribes and the States, working in concert for the first time in history, strongly supports our contention that this program is much too valuable to be canceled while the Department seeks additions of $19.1 million to its favored programs.

As we have repeated testified, a minimal Extension program as provided to all off-reservation communities will require a federal appropriation of $8 million. Therefore, the IAC and our member Tribes are requesting restoration of the $1.75 million deleted from the 1994 budget request and an increase of $6.25 million to a total of $8.0 million in Reservation Extension Programs under the Cooperative Extension Service to comply with the intent of Congress, and to continue this very successful program.

2. Land and Conservation Programs

Reference: Farm Service Agency, Financial Assistance
Title XXV, Other Related Provisions, Sec. 2501(g) Reservations

The combination of several former Departmental Services into a single agency will undoubtedly be a major topic of testimony for many organizations before this committee. Because past assistance to the Indian reservation community from these various "Services" has been poor or non-existent, we are not qualified to comment on the Secretary's approach to improving local service delivery. However, the 1990 FACT Act specifically requires the Department to establish Consolidated Sub-offices consisting of the (former) Soil Conservation Service, the Agriculture Stabilization and Conservation Service, the Farmers Home Administration and others, at each reservation and to staff each such office not less than one day a week.

No money was appropriated, nor has any been requested by the Department to implement this portion of the 1990 FACT Act. To date, and despite glowing reports from the Department, we are able to document only four reservations, from over 300, which receive services from a fully implemented sub-office. Since these sub-offices are to include virtually all the functions which are proposed to be combined into the new Farm Service Agency, perhaps the first American farmers will finally begin to receive at least minimal services from the Farmer programs of the USDA. We have not been able to determine the actual cost of implementing this provision of the Farm Bill, and will not be able to until a realistic number of sub-offices are functional and appropriate averages can be computed.

We are, however, concerned over the proposed devastating cuts in the actual land conservation programs which we have been seeking from the USDA. The Department proposes to cut a real $67 million from so-called Financial Assistance, when adjusted for non-recurring expenditures in Emergency and Stimulus programs. These cuts are hidden by increases in the Conservation Reserve Program and the Wetlands Reserve Program.

The massive cuts in the Agriculture Conservation Program, Watershed Protection Programs and Great Plains Conservation program cannot and

should not be confused with the direct financial assistance to farmers provided through the CRP and new WRP budgets. The programs which the Department is proposing to cut are, in reality, the main land-treatment and conservation programs of this country. These programs are critical to the long-term productivity of our agriculture and grazing lands, as well as our overall environment, and do not constitute direct financial aid to farmers or ranchers.

As more land is enrolled in the CRP or Wetlands program, the Agriculture Conservation Program is the only source for reseeding ground cover, repairing drainage and slope configurations, establishing wildlife habitat, and in general taking direct action to improve the state of our environment. Similar cases can be made for both the Great Plains Program and the Watershed Protection Program. Our country and our environment cannot expect improvement if our main land conservation programs are gutted in order to provide more direct financial payments to farmers or ranchers.

If it is necessary to make cuts and acquire more budget dollars for the land set-aside programs, take those dollars from direct subsidy programs and fund the small conservation programs at a level which may allow this country to produce agriculturally into the next century.

3. Indian land Acquisition Program

Reference: Title XVIII - Credit; Subtitle C - Miscellaneous; Section 1854 - Indian Land Acquisition Program.

The Indian Land Acquisition Program, currently listed under Farm Service Agency, Farm Loan Programs, was previously listed under FmHA. It was created by Congress as a first effort at finding solutions to the jurisdictional and managerial crises facing Indian reservations which result from fractionated land-heirship and checker-boarded land-ownership patterns. This program has provided Tribes with the ability to purchase allotted lands within their jurisdictional area to consolidate ownership and management functions.

Congress raised the authorization for the Indian Land Acquisition program from $2 million to $8 million in the FACT Act. In recent years, the Department has funded this program at one million dollars, and reports limited activity. However, we are told by our member Tribes that FmHA State officials have repeatedly turned away Tribal applicants by stating that no funds are available. Actually, the funding level has been so low that in many years a single loan to a single Tribe has taken the entire appropriation. Turning away potential applicants and operating a program in which a single loan may require the entire appropriation explains the low activity level.

We are requesting that Congress direct the Department to utilize the full authorization of $8 million for the purpose for which it was intended; the

solution of long-standing land-ownership problems on Indian reservations. Since FmHA and RDA, and now the Farm Service Agency, have resources extending well into the billions of dollars we are not requesting an additional appropriation. We are requesting that the Committee and the Congress mandate that $8 million of the total budget in Farm Loan Programs be earmarked specifically for the Indian Land Acquisition Program as authorized in the 1990 FACT Act.

4. Outreach for Socially Disadvantaged Farmers and Ranchers.

Reference: Title XXV - Other Related Provisions, Section 2501 (a) (3) - Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers.

A widely based coalition of minority, rural and American Indian organizations sought the support of Congress for the development of an improved outreach and service delivery system for disadvantaged agricultural producers. Section 2501 of the FACT Act is the result. This section contains specific direction in developing the program and lists Tribally Controlled Community Colleges among organizations eligible to participate in USDA education and outreach programs.

Improved education of our people has long been the over-riding priority for our Tribes. This relatively simple and straight forward section of the FACT Act finally recognizes this priority. For the first time since the passage of that authorizing legislation, the Department has included a budget request to implement this important outreach program for Americans everywhere. We strongly support this move by the Department to finally implement this Congressionally-mandated program.

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The Board of Directors of the Intertribal Agriculture Council, on behalf of our member Tribal governments, are grateful for the opportunity to submit written comments on these issues of importance to the Indian Agriculture community before the House Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies. We ask your assistance in maintaining Congressional and public direction in these critical rural programs of the USDA.

RURAL WATER AND SEWER PROGRAM

WITNESS

LEE GAINES, JR., NATIONAL UTILITY CONTRACTORS ASSOCIATION

Mr. DURBIN. Mr. Lee Gaines of the National Utility Contractors Association.

Mr. GAINES. Mr. Chairman and members of the subcommittee, my name is Lee Gaines, Jr. I am President of Gaines and Company of Hunt Valley, Maryland. My company was founded in 1954. And we specialize in sewer, water and storm drain construction. I previously served as the President of the Associated Utility Contractors of Maryland. I am speaking today on behalf of my fellow contractors, suppliers and manufacturers who comprise the National Utility Contractors Association.

NUCA represents companies like mine who help build the sewer and water systems financed by the Rural Development Administration, Water and Waste Disposal Grant and Loan Programs, and the Emergency Community Water Assistance Grants Program.

Rural America clean water needs are unique, and financing for water and waste facilities is a challenge for most small communities. The RDA Water and Waste Construction Programs provide desperately needed sources of revenue for communities that cannot afford private financing or are unable to utilize the Environmental Protection Agency's State Revolving Loan Fund Program.

Our association's president, Jerry Dorfin, recently completed a job in northern California that illustrates the importance of RDA programs. RDA provided financing for the replacement of a septic system that served a small neighborhood. While he was prospecting the job, Jerry was dumbfounded to see that the families' backyards were saturated with wastewater, raw sewage that had flowed from failed leaching systems.

These families were literally trapped in their own homes. The impact on their quality of life was immeasurable. It is hard to imagine how severely that community would have been affected without help from RDA. Failing waste disposal systems are not the only threat to rural communities. Decaying water pipes are another threat. Until a water main breaks or entire towns are stricken with health problems due to water contamination, people assume that waste delivery systems are adequately maintained.

The photographs and actual sections of corroded drinking water pipe I brought with me today tell a different story. A NUCA contractor in Rhode Island recently removed these pipes from active service. These waste delivery lines could be from any small community. If you ever wondered where the brown stuff comes from when you turn on your tap in the morning, you are looking at it right here.

The evidence of failing infrastructure unearthed every day by underground contractors speaks to the need for continued federal financing. NUCA recommends $1.5 billion in Fiscal 1994 for the RDA's Water and Waste Disposal Grant and Loan Programs. NUCA also supports continued funding for the Emergency Community Water Assistance Grants Program.

Mr. Chairman, adequate funding for water quality facilities is a necessity for life. The projects protect public health and the environment and generate employment and spur economic prosperity.

A 1992 study released by NUCA showed that as many as 57,400 jobs are created for every $1 billion invested in clean water construction. These are good jobs that pay good wages, particularly in rural areas that welcome job opportunities.

The importance of clean water to everyday life is clear. By not providing and maintaining adequate systems to acquire it, deliver it and clean it, we are destroying our fresh water supplies.

We commend the committee for leading the fight for increased rural water funding and the Supplemental Appropriation for 1993, if enacted, would be a welcome shot in the arm. A $1.5 billion appropriation in Fiscal 1994 will help small communities comply with federal requirements and improve their economic status.

NUCA appreciates the opportunity to testify before the panel to give the construction contractors' point of view. We look forward to working with the subcommittee for many years to come. Thank you.

Mr. DURBIN. Thanks, Mr. Gaines. That's one of the reasons we included funds in the stimulus package for water and sewer grant construction.

Mr. GAINES. I know it.

Mr. DURBIN. It's needed. Your samples that you brought here tell the whole story and it certainly would give us some jobs. I hope we can get that moving very soon.

Mr. GAINES. I think a lot of these small communities have jobs ready to go, and it would be very helpful as part of the stimulus package.

Mr. DURBIN. I hope we can get it working over in the Senate. Mr. Skeen?

Mr. SKEEN. No question, Mr. Chairman. You certainly have a graphic illustration of the problem.

Mr. GAINES. Thank you.

Mr. DURBIN. Thanks for coming, and thanks for waiting. I appreciate that very much.

Mr. GAINES. Thank you. I had a great education. You all cover a wide variety of topics here——

Mr. DURBIN. We certainly do.

[The prepared statement follows:]

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STATEMENT OF LEE GAINES, JR.

PRESIDENT, GAINES & COMPANY OF HUNT VALLEY, MARYLAND

ON BEHALF OF THE

NATIONAL UTILITY CONTRACTORS ASSOCIATION

BEFORE THE

HOUSE APPROPRIATIONS SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE & RELATED AGENCIES

REGARDING RURAL DEVELOPMENT ADMINISTRATION WATER AND WASTE DISPOSAL GRANT AND LOAN PROGRAMS FOR FISCAL 1994

APRIL 21, 1993

MR. CHAIRMAN and Members of the Subcommittee, I am Lee Gaines, Jr., President of Gaines & Company, Inc. of Hunt Valley, Maryland. My company was founded in 1954 and specializes in sewer, water, and storm drain construction. I previously served as president of the Associated Utility Contractors of Maryland, and I am speaking today on behalf of my fellow contractors, suppliers, and manufacturers who comprise the National Utility Contractors Association (NUCA).

NUCA represents nearly 1,700 companies across the country who help build the sewer and water systems financed by the Rural Development Administration's (RDA) Water and Waste Disposal Grant and Loan programs and the Emergency Community Water Assistance Grants program.

Rural America's clean water needs are unique, and financing for life-sustaining water and waste disposal facilities is a challenge for most small towns and communities. The RDA water and waste construction grants and loans provide desperately needed sources of revenue for rural residents who cannot afford private financing or are unable to utilize the Environmental Protection Agency's State Revolving Loan Fund (SRF) program.

Our association's president, Gerald Dorfman, of Dorfman Construction in Woodland Hills, California, recently completed a northern California job that illustrates the importance of RDA programs. RDA provided financing for the replacement of a septic system that served a small neighborhood. While he was prospecting the job before preparing the bid, Gerry was dumbfounded to see that the families' backyards were saturated. Saturated not with water, but with

wastewater--raw sewage that had overflowed from failed leaching systems. These families were literally trapped in their homes. The impact on their quality of life was immeasurable. It is hard to imagine how severely that community would have been affected without help from the RDA.

Failing waste disposal systems are not the only threat to rural communities. Dangerously old and decaying water pipes are an equally insipid threat. Until a water main breaks or entire towns are stricken with health problems due to water contamination, people assume that the water delivery systems to their homes and businesses are adequately maintained. However, photographs and actual sections of corroded drinking water pipe I have brought with me today tell a different story. A NUCA contractor in Rhode Island recently removed these pipes from active service. These water delivery lines could be from any one of a thousand small communities across the country.

If you've ever wondered where the brown stuff comes from when you turn on your tap in the morning--you're looking at it. Restricted flow in a drinking water pipe has several, less obvious, ramifications. First, the water pressure in the pipe must be increased to transport the same volume of water to the customer. Therefore, the pump works harder and uses more energy. Secondly, you cannot get a sufficient volume of water through fire hydrants to adequately feed fire hoses. These are just a few problems that accompany crumbling clean water infrastructure.

Recommendation For Fiscal Year 1994

The evidence of failing water and waste disposal systems unearthed every day by underground contractors points to the need for continued federal support for the construction, replacement, and rehabilitation of clean water infrastructure in rural areas that are unable to afford other types of financing. NUCA requests that the Subcommittee approve $1.5 billion in fiscal year 1994 for the RDA's Water and Waste Disposal Grant and Loan programs ($600 million and $900 million respectively). NUCA also supports continued funding for the Emergency Community Water Assistance Grants program.

Clean Water Infrastructure Is A Necessity For Life

RDA grants and loans for drinking water and waste disposal systems are a critical federal investment that should be continued. Clean Water Act and Safe Drinking Water Act compliance is a major financial problem for many small communities. Without these grants or low-interest loans, new construction and system rehabilitation simply would not happen. Traditional funding sources remain out of reach for rural communities that have a limited tax base. The National Rural Water Association recently pointed out in its testimony before the subcommittee that many rural water districts do not have the authority to issue public debt to pay for necessary improvements.

Financial obstacles aside, adequate funding for water quality facilities is a necessity for life. These projects protect public health and the environment, generate employment, and spur economic prosperity. Investment in water and waste disposal systems increases the rate of return to private capital, labor

productivity, private investment in plant and equipment, and the tax base of the community.

As you may recall from our testimony last year, a 1992 study released by NUCA concludes that as many as 57,400 jobs are created for every $1.0 billion invested in the construction of water supply and waste disposal facilities. These are good jobs that pay good wages, particularly in rural areas that welcome job opportunities.

Putting People First -- Fiscal 1994 Appropriations

The importance of clean water to everyday life is clear. But by not providing and maintaining adequate systems to acquire it, deliver it, and clean it, we are destroying our fresh water supplies.

This subcommittee led the fight for increased funding for the current fiscal year, and the supplemental appropriation for fiscal 1993, if enacted, will be a welcome shot in the arm for rural economic development. We now urge you to charge full speed ahead for fiscal 1994. A $1.5-billion appropriation will help small communities comply with federal requirements and improve their short- and long-term economic status.

NUCA appreciates the opportunity to testify before the panel and provide the construction contractor's point of view. We look forward to working with the subcommittee for many years to come. Thank you.

CENTER FOR SUSTAINABLE DEVELOPMENT OF ARID LANDS

WITNESS

JOHN C. OWENS, DEAN, COLLEGE OF AGRICULTURE AND HOME ECONOMICS, NEW MEXICO STATE UNIVERSITY

Mr. DURBIN. From New Mexico State Unversity, Dean John Owens.

Mr. OWENS. Thank you, Chairman Durbin. I am glad to be back here again. It seems like it was only a moment ago, and I was just thinking, sitting there, it was last year—time really goes quickly.

I am here today to talk about the Center for Sustainable Development of Arid Lands which we hope to construct on the New Mexico State Unversity campus. The Center will be dedicated to sustaining agriculture and natural resources in the arid regions of the U.S.

And also to promoting international scholarship and economic activity, particularly with Mexico. And I was delighted that the committee took that recent trip to Mexico. As you probably know, we are the land grant university closest to the U.S.-Mexico border. And we built a lot of strong ties with Mexico, and are working hard to do that.

As a matter of fact, this particular center also has a strong component with Mexico. And we anticipate that we will be joining a Mexican consortium on the arid lands situation as a result of this. Our colleagues in the Mexican Universities are very excited about that. We are fortunate to have trained many of them at New Mexico State Unversity with their doctoral degrees.

My basic problem in terms of needing this building is that I work at the nation's most diverse land grant institution, for all practical purposes there is no majority-minority situation at New Mexico State Unversity. We also are the nation's most diverse state, based on the probability of any two New Mexicans sort of randomly encountering each other on the street of different ethnicity. And it works very well in New Mexico, as I'm sure you know.

We are blessed with inadequate teaching, research and diagnostic facilities, and this center will go a long way to solving those. The need for the center was especially underscored to me and many others in one of our main buildings on campus when on December 20 we had a terrible fire the afternoon or the evening of December 20. Congressman Skeen was in the region and happened to stop by and look at it.

In about a ten-minute fire, we lost about $1.5 million worth of research facilities and other materials. That particular building is a 31 year old building. It's virtually impossible to correct it with remedial work because of the way it was constructed with the technology of the day.

The USDA CSRS facility review team just left our campus last week. Early indications were that we got a very favorable review from them. I think they were quite impressed with the institution and we also were impressed with that team. And they came to our campus as a result of the work of this committee.

You might also recall that in addition to the regular New Mexico State Unversity activities, a good portion of this building will house the USDA's agriculture research services, Hornada Range Scientists. The Hornada is the largest facility that the USDA has in terms of square miles, has absolutely inadequate facilities on our campus. We provide them some courtesy space, but some of their laboratories are literally in mobile homes. And that particular Hornada Range in the contiguous college ranch has a NSF long-term ecological research site located on it. And that would become very much a part of what we are about.

Both the Los Alamos National Laboratory and Sandia National Laboratory and the Santa Fe Institute do chaos think tank people are terribly interested in our database there and may also well work in this particular facility. Both houses of the New Mexico Legislature have been quite supportive of this idea.

As a matter of fact, they passed a total of four resolutions in support of building this center. With that, I shall quit and be happy to answer any questions that you might have.

Mr. DURBIN. I'm going to defer to my New Mexican expert, Congressman Joe Skeen.

Mr. SKEEN. That's all it takes to be an expert around here, just last long enough. That's a good presentation, Dr. Owens, and I appreciate the fact that you came. By the way, after our trip through Mexico we went into Tucson and visited with the folks from the University of Arizona.

Mr. OWENS. I heard you were over there, Congressman.

Mr. SKEEN. I figured the word got around. I just want to commend you folks on the way that you operate your consortiums for the southwest and for those types of problems that are unique to this region of the country. And I think that they are working very well. I hope that we don't have the white fly problem in New Mexico because if we get it stopped in that part of the country, I think it would be a great saving to all of us. Good presentation. Sorry we had to keep you so long.

Mr. OWENS. No problem at all.

Mr. DURBIN. Go back to New Mexico and tell them how late we work around here.

Mr. OWENS. I shall.

Mr. DURBIN. Thanks for joining us.

Mr. OWENS. Thank you very much, Congressman. Appreciate it.

[The prepared statement follows:]

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April 22, 1993

Testimony to House Appropriations Subcommittee

If we are serious about mainstreaming ethnic minorities into our scientific community, it must begin with quality teaching facilities. If we are serious about addressing the press of urbanization and other development on our fragile desert ecosystems, we must have quality research and diagnostic facilities. If we want to preserve the ecological integrity of the Southwest, even as the United States makes the area a critical zone of international commerce among the Americas, we must promote cooperative international scholarship in the region. If we are serious about these issues, then we have every reason to be serious about the Center for Sustainable Development of Arid Lands at New Mexico State University.

Today, New Mexico State University has woefully inadequate teaching, research, and diagnostic facilities serving a population and region representing some of our nation's best hope for social and economic development in the setting of a fragile environment. Today, NMSU cannot rehabilitate aging and short-spaced facilities to contemporary standards. As a result, we cannot adequately respond to the region's challenges and opportunities.

Continued success of agricultural endeavors in the Southwest will depend on the ability to minimize any adverse ecological impacts of agriculture. The future of both agriculture and natural resource management depends on the ability to address resource and environmental concerns of water quality and quantity, urbanization, bio-diversity, ecosystem integrity, and economic use of resources.

The ability to maintain a quality environment is fundamental to the international competitiveness of our agricultural industry. Any inability to establish harmony between the goals of the agricultural industry and the ecological integrity of our natural resources will result in decline of both industry and the environment.

New Mexico State University is the optimal place to develop the Center for Sustainable Development of Arid Lands because of the university's history, its human composition, its geographical location, and its organizational culture.

NMSU is in a unique position to bring high technology to bear on arid lands issues. NMSU is the land-grant university in the state with two national laboratories and numerous military facilities. NMSU, through Technet, is on the national electronic highway, with two state Centers for Technical Excellence located on campus. White Sands Missile Range has had a strong research and development relationship with the university since World War II, particularly through the NMSU Physical Sciences Laboratory.

NMSU is a prime institution for educating an ethnically diverse student body to become part of the scientific community. NMSU reflects the diversity of the New Mexico population, with more than four in ten freshmen being ethnic minorities. Since 1987, the number of Indian, Hispanic, and African American students has risen 77, 47, and 28 percent, respectively. The Hispanic student body has increased by 1,500 students in that time. The 54 Native American students in the College of Agriculture and Home Economics are said to be the largest number in any college of agriculture in the nation.

The university has grown with New Mexico. Much of its growth is quite recent, which accounts for a student body that reflects the state of New Mexico and a young and energetic faculty. NMSU is the land-grant university in a state with two national laboratories and numerous military facilities. The closest facility is White Sands Missile Range which has had a close relationship with the university since World War II. The work of the Physical Sciences Laboratory at NMSU and that of many other departments, including those in the College of Agriculture and Home Economics, places NMSU in a unique position to bring the technology of the defense industry to bear on arid lands issues.

NMSU has a history of accessibility and it has become the university of choice of New Mexico residents. Even as the number of New Mexico high school graduates declined in recent times, NMSU grew at several times the rate of the University of New Mexico -- accounting for 60 percent of the growth in higher education in the state. Already about 50 percent female, the student population of the university increasingly reflects the state's ethnic make up with every new freshman class. Since 1987 the number of Indian, Hispanic, and African American students has risen 77, 47, and 28 percent, respectively. The Hispanic student body has increased by 1,500 students in that time. Meanwhile, tenured and tenure track faculty have undergone change. Since 1987, Hispanic faculty numbers have increased 58 percent and female faculty 77 percent. Today the tenured and tenure track faculty is more than 13 percent ethnic minority and more than 19 percent female. (College figures here)

NMSU brings scholarly excellence together with a diverse student body. Today NMSU is the only Hispanic serving institution -- an institution with more than 25 percent Hispanic student body -- that also is a Carnegie Foundation Research Category I Institution.

The state of New Mexico recently became a minority/majority state in which no single ethnic group makes up a majority of the populations. The state has been dubbed the nation's most diverse based on the probability of any two randomly selected citizens being of differing ethnic backgrounds.

NMSU enjoys excellent support from the state of New Mexico. Despite ranking in the bottom five or six states in per capita income, New Mexico ranks in the top 10 percent in per capita contributions to higher education. The New Mexico Legislature has passed four memorials during the last two years expressing support for the Center at NMSU.

NMSU is a highly effective networked organization in an era when networks across disciplines, colleges, universities, and national borders are essential to success. Many of the senior faculty and administrators of Mexican universities are alumni of NMSU, which is the closest land grant university to the Mexican-American border.

Mexico and New Mexico share the same arid land resources, but also many of the same mix of peoples and development challenges. The domestic and international agenda, therefore, is in many interchangeable. The arid rangelands of the Southwest represent the world's most common land type. The College ranch is adjacent to the Jornada Experimental Range, creating a vast outdoor laboratory with generations of documented date. Science in this laboratory is conducted by NMSU scientists from 10 departments in two Colleges and has attracted scholars from around the world. Agricultural Research Service researchers hold courtesy faculty appointments in the College of Agriculture and Home Economics.

NMSU is working with a Mexican arid lands consortium to create a regional agenda and it continues its association in the International Arid Lands Consortium with the University of Arizona, the University of Illinois, South Dakota State University, and Texas A&I. These consortia will benefit from the enhancement of arid lands work at the Center.

In an era when organizations are coping with the transition from rigid departmentalized structures to the contemporary networked organization, New Mexico State University profits by finding itself already network oriented. To a great extent, historically lean funding made the development of independent entities within the university impossible. Instead, resources had to be shared across organizational lines to create functional programs. Even academic departments in the university tend to incorporate a broad array of disciplines, making research within departments interdisciplinary in nature. There is a strong tradition of interdepartmental and inter-college programming as well.

For example, cross listing of courses among several departments in separate colleges is common and traditional practice at NMSU. Faculty from departments in the College of Agriculture and Home Economics serve as graduate faculty in other departments within the College and in other NMSU colleges. The molecular biology

graduate program includes faculty from two colleges led by the graduate dean. The establishment of the Plant Genetics Engineering Laboratory as a center of technical excellence at NMSU created the initial impetus for the molecular biology program. A core of eight faculty was hired in five departments in two colleges to support the laboratory in 1985. Since that time, molecular biologists associated with the molecular biology program have doubled, and several departments have hired young faculty with molecular skills.

In short, programming in cutting edge science has developed not as a result of establishing a rigid base for research focus, but by allowing various departments to participate in a research and teaching focus while still relating to traditional disciplines. The Center for Sustainable Development of Arid Lands extends the same principle for effective interdisciplinary work. The Center will attract teachers, researchers, and Extension professionals to a common set of tools. As a result, a wide variety of outlooks will be drawn to share common interests. The Center will not be the province of those who are interested in agricultural production alone, or ecological integrity alone, Rather, it will serve to meld these interests in common scientific endeavor.

What is needed to make this dream a reality is quality space for teaching laboratories, research laboratories, and diagnostic laboratories, and other teaching facilities.

The Center will address the problems of arid lands development through scholarly activity cutting across many of the traditional barriers that limit the effectiveness of scholarly activity. The Center will serve to bring together working groups that address research, instruction, and Extension functions across traditional boundaries of disciplines, departments, colleges, ethnicity, states, and nations.

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GEOGRAPHIC INFORMATION SYSTEMS

MARGARET MAIZEL, NATIONAL CENTER FOR RESOURCE INNOVATIONS

WITNESS

Mr. DURBIN. The most patient witness of all, Margaret Maizel, of the National Center for Resource Innovations.

Ms. MAIZEL. Mr. Chairman, thank you for the opportunity to present testimony today. My name is Margaret Maizel. I am the executive director of the National Center for Resource Innovations.

NCRI is a private not-for-profit organization. It was established with bipartisan support by Congress through appropriations to USDA and the Cooperative State Research Service in 1990.

The mission of NCRI is through its current network of six regional project sites nationally to implement corroborative and innovative transfer of geographic information systems and related technologies to local governments and other policymakers.

We are now a total of six sites. We started out in 1990 with three sites, one being the national office in Rosslyn, Virginia, which operates the Chesapeake Bay project. One at Valdosta, Georgia. And one at the University of Arkansas.

Since then we have added three new sites. One at Central Washington University, the University of North Dakota, and the University of Wisconsin.

The funding for NCRI started out in 1990 at $500,000. It increased in 1991 to $774,000. In 1992 and 1993, it reached one million for both years. Funding for Wisconsin was established in parallel. And we are now at the stage where our real programmatic needs are $3.45 million, and we are asking for a modest $1.8 million.

What I would like to do is show you how much we have accomplished since we began in 1990, and document where we are expecting to go in the next few years.

As many of you know, geographic information systems are computer systems which are hardware, software, and graphics. They allow you to encode multiple layers of resource information and cultural data to use for many purposes, including potentials for pesticide leaching from farms. You can model social and economic parameters of rural communities and farm systems. You can describe sensitive ecosystems. You can model effects of storms and plan emergency services.

Most of all, of importance to this committee, I believe, is that using GIS, we can help farmers and agencies to target programs, and improve farm operations, as well as implementing conservation programs.

NCRI operates at the nexus between university systems where education and technology development occurs, and federal agencies who implement large field sized information systems that are essential for public policy.

Just to go quickly. The Chesapeake project is addressing the issue of the Chesapeake Bay Restoration Act. It is designed as a research and technology theater where we can demonstrate the cooperative work between federal and state agencies, and land grant universities in the 42 million acres of the Chesapeake Bay drainage.

Workshops in this area are being designed for cooperative technology transfer to other regions of NCRI's project sites.

In Georgia, the issue there is economic development faced with environmentally sensitive areas. In Arkansas, they are concentrating on technology training, training of state agency people and local governments, and other people in the region, and development small scale demonstration systems.

Central Washington University is an educational institution. They are spending a great deal of time building an awareness at the state level and at the local level about the value of this technology.

At UND, weather is an issue for farming. There is a short growing season, and climate is a problem, and declining aquifers are a problem. NCRI is working to address those policy issues there.

At the University of Wisconsin, at the land information and computer graphics facility, the institutional issues there are coordinated system development between local governments. ASCS, Farmers Home, the Soil Conservation Service, and Conservation Districts. They are succeeding rather well at getting farm plans implemented really quite quickly in response to farm bill and conservation program delivery.

We cooperate with federal agencies, and I will go through this quite quickly. We have built a national GIS at the Chesapeake project, in which the Economic Research Service, the Soil Conservation Service, the Cooperative State Research Service, and NCRI have been able to identify, also working with Texas A&M, those areas of the country with the highest potential for pesticide leaching to groundwater, as well as excess nitrate.

We can then use the system to focus on regional areas which may have predominant problems that are generally identified and go and look more carefully at what those problems might be.

The Chesapeake Bay is amongst those most sensitive areas in the country. Here in the Chesapeake, our cooperators are the six state conservationists for the Soil Conservation Service, the land grant universities, and the state agencies who work with them.

Georgia is working with the National Diadetic Survey of NOAA to build higher precision data bases. Arkansas is working with Fish and Wildlife on a national battlefield protection program of the National Park Service to build more data layers for the state.

Central Washington is working with the state agencies and ASCS to build better information about soils in the Acamaw and Columbia River basins.

U.N.D. is working with the National Weather Service to incorporate weather data into geographic information systems.

Our sites all cooperate with each other. That is documented in my presentation, and I will not go through that too extensively. Our principal cooperators in the Chesapeake are the Economic Research Service, the Soil Conservation Service at USDA, and USGS, the Division of Water Resources.

We also work in building local access to data sets. We have a great outreach program with each of our projects. We do workshops, newsletters, press articles, video productions, papers, and other presentations and poster sessions.

Our funding in fiscal 1994 will enable us to extend these efforts. Until now, we have established our programs, and we have established data bases, and begun information systems. Our next phases will address more specifically policy applications, and the beginning of modeling that will lead to I think really innovative policy that will be resource oriented.

Still, though, there will be a need to develop these techniques to become effort public education programs, which they can be, once you have developed good policy.

This is an expanding program. It has been successful at attracting matching funds. Our needs, as I said before, are $3.45 million. We are requesting $1.8 million. It is a one of a kind program. It has a giant critical mission, we think. It meets the administration's stated priorities for enhanced technology for better public policy and sustained environments in rural areas.

I thank you for this opportunity. And you folks do work a long time. I appreciate this very much.

Mr. DURBIN. Well, thank you very much for your testimony. And we will certainly be looking at it closely as we start our mark-up in the next weeks.

Ms. MAIZEL. Thank you very much.

Mr. DURBIN. We certainly have a diverse number of institutions, and quite a bit of work that you are doing here.

Ms. MAIZEL. We love it.

Mr. DURBIN. Mr. Skeen.

Mr. SKEEN. You are a very diverse organization. Who coordinates all of that?

Ms. MAIZEL. The national office, my office. I am the executive director.

Mr. SKEEN. Where is it located?

Ms. MAIZEL. Right here in Rosslyn, Virginia.

Mr. SKEEN. Here in Rosslyn.

Ms. MAIZEL. We would love to invite you all over.

Mr. SKEEN. We would be glad to come by and see it. Thank you very much.

Ms. MAIZEL. Thank you so much.

Mr. DURBIN. Thank you for joining us.

Ms. MAIZEL. Thank you. Good night.

[The prepared statement follows:]

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April 20, 1993

Richard J. Durbin, Chairman
Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies
Room 2362 Rayburn Building
Washington, DC 20515-6015

Dear Mr. Chairman:

We appreciate this opportunity to present testimony to the House Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies.

Background - The National Center for Resource Innovations is a private not-for-profit organization established with bi-partisan support by Congressional appropriation through the U. S. Department of Agriculture in 1990. The unique mission of NCRI is, – through a current network of six regional technology transfer centers – to provide collaborative and innovative transfer of geographic information systems and related technologies to support local government and other public policy development and decision making.

The House and Senate conferees provided $500,000 in 1990 to CSRS/USDA for the establishment of regional centers for the Chesapeake Bay region, at NCRI's National Office in Rosslyn, VA which coordinates NCRI's program; at the South Georgia Regional Development Center, Valdosta, Georgia and at the University of Arkansas, Fayetteville.

In FY '91 two new sites were added with funding of $774,000 through CSRS/USDA. They are Central Washington University, Ellensburg, Washington and the University of North Dakota, Grand Forks. The University of Wisconsin-Madison was added as supported by parallel funding through CSRS/USDA. In FY '92 and '93, funding in the amount of $1.0 million was provided in both the House and Senate. A separate amount of $75,000 was provided for the University of Wisconsin Madison identified as the 'CONSOIL' project.

Request - In this testimony, NCRI wishes to document its impressive accomplishments and plans for meeting its mission to improve the sustainability of irreplaceable rural natural and cultural resources through better public policy. Though our realistic program needs are on the order of $3.45 million in FY '94, we are requesting a federal funding of $1.8 million to support this critical program. Part of these funds will be allocated based on a merit review process.

Technologies for today and the 21st century. As you know, GISs are computer-based technologies including hardware, software and graphics capabilities that can be used to encode, analyze and display information related to natural resources, property boundaries and socio-economic variables among many other subjects. Of critical importance is the information systems they use for analyses. For local governments, these systems depend almost entirely on highly cooperative and collaborative efforts by educators, scientists, technologists, and yes, even artists. By design, they must address the public policy process. To be effective they must be built as educational tools that can be used for describing decision making rationales.

They can be used to locate areas with a high probability for pesticide and farm chemical leaching beyond the root zone, to model social and economic parameters of rural communities and farm systems, to describe sensitive ecological areas and their spatial relationships to land using activities, to model effects of storms and plan emergency services, and to help farmers and agencies make optimal decisions regarding program targeting and assessments that will improve farm operations and implement conservation programs.

By nature, a shared effort. NCRI strongly supports the concepts of shared data layers in cooperative, comprehensive information systems that are now possible with advanced information systems technologies. Working jointly with the university world where education and technology development are priorities and with federal agencies where large capacity, field level, information systems are developed, NCRI focuses to serve the public policy maker and his/her community at all levels.

The unique structure of NCRI enables this consortium to facilitate technology transfer and problem-solving approaches between its regional project sites as well as within the "vertical" technology transfer and delivery network that operates locally.

Institutional structures, regional information and policy issues will nevertheless vary with local priorities and needs. This is decidedly an asset and speaks to the fact that though confronted with similar resource issues, the answers are best addressed within contexts of people, available technology and institutions.

Institutions and Policy Objectives. NCRI's Chesapeake Bay project addresses the objectives of the Chesapeake Bay Restoration Act to protect the Chesapeake Bay. NCRI's Chesapeake project is designed largely as a research and technology transfer project to illustrate GIS methodologies, federal and state cooperative efforts and shared integrated information systems that can support the sustainability of the Chesapeake Bay's 42 million acres of land and associated resources in parts, or all of six states. The GIS is a dynamic, layered information system comprised of national, regional and local perspectives. It is being built in response to various needs including, but not limited to comprehensive and coordinated information about agricultural and forest resources, water, soil and air, urban lands and population growth, important habitat areas, unique and scenic areas and other sensitive resources in the Chesapeake Bay watershed.

NCRI's program in Georgia is an integral component of the South Georgia Regional Development Center -- a regional planning agency that supports a ten-county region in the Suwanee river basin on the Florida border with planning, economic development and administrative support. NCRI's primary objective is to encourage ecologically responsible economic growth in the region. NCRI here, is addressing policy mandates by the State of Georgia that require the development of Comprehensive Plans using GIS technologies for growth management and tax revenue recovery for local governments through timber taxation at harvest.

NCRI's program at the University of Arkansas, Fayetteville, is a component of a large effort, the Center for Advanced Spatial Technology (CAST). Here, NCRI is concentrating on technology development and training of state, university and local personnel. Small-scale demonstration and educational projects that can illustrate the value of GIS to state and local officials for local ordinances including landfill siting, ground water vulnerability estimates by watershed, fire protection and mapping of forest resources are a primary focus of the program.

NCRI at the University of North Dakota is housed at the Institute for Earth Systems Sciences which also incorporates Atmospheric Sciences, Space Studies and the Department of Geography. NCRI's interdisciplinary research is supported at the Institute by the Center for Aerospace Science' Scientific Computing Center which houses a CRAY X-MP supercomputer and the Regional Weather Information Center. The resource issues in the region are related to the enhancement and protection of farming and ranching which are principal contributors to the region's economy. Here, NCRI is collecting and disseminating complex and changing regional climate and weather information as it affects aquifers, soils, demographics and land use in the region.

NCRI at Central Washington University has been concentrating on technology transfer to several local governments by working in the Yakima and Columbia bio-region to build technical understanding and broaden educational efforts about applications of GIS in local governments and at the state level.

NCRI at the University of Wisconsin-Madison has a long-time history of delivery of GIS technologies to local governments. Here, the institutional issues surround cooperation between federal agencies -- the Soil Conservation Service, Agricultural Conservation and Stabilization Service, and one-stop conservation planning through local Soil and Water Conservation Districts. Local governments are encouraged to cooperatively develop local GIS for farm and environmental resource conservation policy implementation. NCRI in Wisconsin continues a tradition of state level support for GIS-based comprehensive planning through land transfer taxes and state-level Land Information Systems policy development.

Data bases and information systems are being developed by all NCRI project sites in collaboration with federal and state agencies.

The Chesapeake project has built a national GIS framework to use the invaluable National Resources Inventory-SOILS data bases of the Soil Conservation Service/USDA, with pesticides use data on 25 specific crops associated with 2,000 soils in the nation and national precipitation information. With

SCS, the Economic Research Service/USDA and Texas A&M University's Blackland Experiment Station, NCRI has identified areas of the country where ground water is likely to be most vulnerable to farm chemicals.

These techniques and other indexes are being transferred to a regional GIS where indexes will be enhanced to address ground and surface water impacts of sediment, from nutrients and other farm chemicals on the land and water resources of the Bay. This is being developed in collaboration with the State Conservationists of the Soil Conservation Service/USDA in Maryland, Virginia, Pennsylvania, New York, Delaware and West Virginia; the state agencies and land grant universities who are their cooperators; ERS/USDA and the U.S. Geological Survey Division of Water Resources, Department of the Interior. NCRI has also been cooperatively supporting, through the Pennsylvania Conservation Commission a local GIS project in Lebanon County where the Conservation District has assisted the county in implementing a ground water protection ordinance.

In Georgia, the Regional Development Center has opted to integrate satellite imagery with TIGER files of the U.S. Bureau of the Census for regional planning for forest timber tax revenue recovery. In collaboration with the National Geodetic Survey's Geodetic Advisor program, they are using Global Position Systems to assist them in building precise regional data bases.

NCRI in Arkansas has developed 25 statewide data layers that are available to everyone by electronic linkage and other means. Projects with the Fish and Wildlife Service and the Civil War Battlefield Protection Program of the National Parks Service are enhancing information systems for Battlefield protection and ecosystem delineations within the state. Pilot projects in Washington county are being used as educational projects to demonstrate the technology to others.

At Central Washington, contacts have been made with the Soil Conservation Service for assistance with soils information and relationships with the State Geographic Information Committee built. Here, NCRI is concentrating on grassroots level collaborations with many counties in the Columbia, Yakima and Coer d'Alene, Idaho bio-regions. Regional data base development including satellite imagery and digital elevation data as well as forest (old growth) and other wildlife habitat information has continued.

NCRI at the University of North Dakota has been cooperating with the National Weather service for radar-based weather and statewide precipitation data with remote sensing data from NASA to estimate "greenness" for range fire prediction models. These models will support state agencies among others. A computer platform to describe real-time weather information for future merger with standard GISs has been developed. NCRI is also assisting Grand Forks County in developing a GIS-based emergency planning system.

NCRI project sites are networkers -- collaborating with each other -- as well as outside programs for problem-solving and technical assistance.

Central Washington has assisted Georgia in acquiring remote sensing and software training. Cooperative projects to incorporate weather with physical and socio-economic data in the upper midwest

are being developed by UND, the University of Wisconsin and the Chesapeake Project. The Chesapeake project has assisted the Economic Research Service/USDA in building a GIS at USDA for national and global economic and resource issues.

The Chesapeake project is sharing its national GIS with the University of Michigan and the Economic research Service to mutually explore Farm Policy issues for the 1995 Farm Bill. These policies could be tested within NCRI's project areas. The NCRI Board of Directors will sponsor a joint workshop with the University of Wisconsin and the Chesapeake project for cooperative technology transfer with SCS to each project site. The Georgia project site is looking south to the Suwanee River Basin Water District in Florida in order to share information about their common resources -- And these are only a few examples!

All of NCRI's project sites are networkers -- building electronic access to data bases for all users within their regions and sharing information between sites. Outreach efforts include many workshops with 'take-home' workbooks, newsletters, press articles, plans for video productions, papers, presentations and poster sessions at national and international meetings. UND is using weekly weather reports on their local TV station to talk about GIS applications and promote understanding in the region about NCRI's mission.

We are immensely proud of our unique and effective national program that already is producing better resource information systems in collaborative and cooperative efforts. We have accomplished much in our short lifetime and look forward to our next productive year.

We look together for increasingly better public policy resulting from our collective good works.

The federal appropriation requested for FY '94 in the amount of another $1.8 million will allow NCRI to continue to meet its very large mission. This one-of-a-kind program meets the administration's stated priorities of enhanced technology for better public policy making in rural areas.

Thank you again for this opportunity to submit testimony.

Sincerely,

Margaret Stewart Maizel
Executive Director-NCRI

STATEMENTS FILED FOR THE RECORD

Mr. DURBIN. A number of Members and others who were unable to appear before the Committee in person have asked that their statements be printed in the record. Those statements received by the Committee will be placed in the record at this point.

[The statements submitted for the record follow:]

Statement of Congressman James A. Hayes of Louisiana

before

The Appropriations Subcommittee on Agriculture, Rural Development, FDA, and Related Agencies

March 18, 1993

I am contacting you today to request an FY'94 appropriation of $120,000 to assist Louisiana Animal Damage Control in administering a blackbird control program in Vermilion and Evangeline parishes located in Southwestern Louisiana.

During the winter, the blackbird population in Vermilion and Evangeline Parishes totals tens of millions of birds that roost in the marshes along the coast. These blackbirds destroy many acres of planted rice per day at considerable loss of money and time to Louisiana rice farmers.

The only chemical currently in use and known to be effective for Blackbird control is the avicide DRC-1339, also known as Starlicide. This chemical is registered to the USDA/APHIS/Animal Damage Control Program for use in both Vermilion and Evangeline Parishes and must be applied under direct supervision of Animal Damage Control. A national registration for the chemical is under consideration by the Environmental Protection Agency and expected to be approved later this year.

ADC would like to continue a pilot program in Vermilion Parish, but is lacking the necessary funds. An appropriation of $120,000 combined with the funding and materials that the rice growers are willing to provide will bring this very important pilot program to fruition.

Thank you for your consideration of this request. Please do not hesitate to contact me if I can provide any more information.

TESTIMONY OF CONGRESSMAN JAMES V. HANSEN BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE

MR. CHAIRMAN, I HAVE BEEN WORKING WITH THE UTAH FARM BUREAU, THE UTAH CATTLEMEN'S ASSOCIATION, AND THE UTAH WOOL GROWERS IN SUPPORT OF A BUDGETARY INCREASE FOR THE U.S. DEPARTMENT OF AGRICULTURE, AGRICULTURAL RESEARCH SERVICE, POISONOUS PLANT RESEARCH LABORATORY, AT UTAH STATE UNIVERSITY. WE ARE ASKING FOR AN APPROPRIATIONS OF $893,550 FOR FY 1994.

AT THE PRESENT TIME, THE LABORATORY HAS EXTENSIVE RESEARCH PROGRAMS ON PONDEROSA PINE NEEDLE-INDUCED ABORTION IN CATTLE; LARKSPUR POISONING IN CATTLE; PLANTS CAUSING LIVER DAMAGE SUCH AS THREADLEAF GROUNDSEL, RIDDLE

GROUNDSEL, AND HOUNDSTONGUE; SELENIUM POISONING; AND LOCOWEED POISONING. THE PLANTS LISTED ARE IMPORTANT CAUSES OF LIVESTOCK POISONING AND THE SUBSEQUENT ECONOMIC IMPACT TO THE LIVESTOCK INDUSTRY IS FELT NOT ONLY IN UTAH, BUT ALSO IN THE MAJORITY WESTERN STATES AND THROUGHOUT THE ENTIRE UNITED STATES.

THE USDA-ARS POISONOUS PLANT RESEARCH LABORATORY IS AN IMPORTANT CONTRIBUTOR TO THE LIVESTOCK INDUSTRY. HISTORICALLY, POISONOUS PLANTS HAVE CAUSED SIGNIFICANT PROBLEMS FOR THE LIVESTOCK COMMUNITY. THE PLANTS ARE A HINDRANCE TO THE PROPER USE OF THE FORAGE PRODUCED BY THE RANGES AND PASTURE LANDS.

THE UNITED STATES DEPARTMENT OF AGRICULTURE ESTIMATES THAT POISONOUS PLANTS CAUSE ANNUAL LOSSES TO LIVESTOCK PRODUCERS

IN THE WEST IN EXCESS OF $340,000,000. HOWEVER, THIS FIGURE DOES NOT INCLUDE ALL LOSSES SUCH AS DECREASED WEIGHT GAIN AND THE LESS DIRECT LOSSES SUCH AS MANAGEMENT CHANGES, FORAGE LOSS, FENCES, ETC., DUE TO POISONOUS PLANTS, NOR DOES IT INCLUDE THE ENTIRE UNITED STATES. IT IS MY FEELING THAT WE CANNOT AFFORD THIS ECONOMIC LOSS AND THAT SUPPORT OF THE POISONOUS PLANT RESEARCH LABORATORY WILL DO MUCH TO BRING THE PROBLEM UNDER CONTROL.

THE HARSH DESERT CLIMATE OF UTAH AND THE WEST REQUIRE THAT WE MAXIMIZE OUR RANGELANDS. THIS PROGRAM PLAYS AN IMPORTANT PART IN THE ECONOMIC GROWTH OF UTAH. THE ABILITY TO PROVIDE NEW AND IMPROVED MANAGEMENT OPTIONS TO OUR LIVESTOCK INDUSTRY IS VITAL.

THANK YOU FOR YOUR TIME AND

CONSIDERATION OF THIS IMPORTANT FUNDING NEED FOR FY 1994.

INTERNATIONAL ARID LANDS CONSORTIUM

The International Arid Lands Consortium (IALC) was formed in 1990 and is the first worldwide body dedicated to coordinating interdisciplinary research and the application of that research in an effort to fight the encroachment of human-made deserts. The problems created by increasing global desertification and the impact of that phenomena on food production and associated areas of study such as soil and water conservation have only recently begun to receive wide-spread attention.

The IALC's mission is to develop & coordinate collaborative research programs on the problem of desertification by encouraging the study of restoration ecology between its member institutions in the United States and Israel, and to develop methods by which the results of that research can be applied around the world.

The IALC is dedicated to exploring the unique problems - and solutions - of arid and semi-arid regions. As an independent nonprofit organization, the Consortium offers hands-on expertise. IALC founding participants are the University of Arizona, University of Illinois, New Mexico State University, South Dakota State University, Texas A&I University, the Jewish National Fund (JNF), and the USDA Forest Service. Additionally, Time-Warner, Inc. has become the IALC's first corporate sponsor.

Each member institution brings its own distinctive capabilities to bear on the study and on the use of arid and semi-arid lands, providing expertise in such areas as sustainable agriculture, water conservation and harvesting, development of stress-tolerant plants, agroforestry, range management, fire control, remote sensing, and drought mitigation. Integrated assistance, drawing from this interdisciplinary pool of resources, addresses problems resulting from increased aridity and thus can help developing nations foster sustainable resource practices.

The IALC was authorized by Congress in the Research Title of the 1990 Farm Bill [PL-101-624, Sec. 1613 (8)]. Therefore, the IALC is funded, in part, by the U.S. Congress, in recognition of the IALC's goals: to develop creative solutions to the challenges inherent in the use and development of the world's arid lands, and to apply the results of arid lands research in this country and abroad.

In FY 1993, $350,000 was appropriated for the Consortium in the USDA Forest Service budget. This modest amount has allowed the IALC to begin building on the capabilities of the Consortium's members, but is not sufficient to undertake and continue the truly critical mission of finding ways to combat the growing environmental crisis of desertification and drought. However, presently, this is the only U.S. coordinated program that works in this important area with funding initiated by the previous administration and recommended for continued funding by the current administration.

Recently the IALC has awarded support for seven peer-reviewed projects in the United States and in Israel. The titles of the proposals are:

Soil Salinization Induced by Runoff Collection in Small Forested Limans in the Negev Desert

Patchiness Modification and its Effect on Water and Nutrient Flows

Arid Lands Water Resources Monitoring for Outlier Events on Ungaged Watersheds Using Radar Rainfall Measurements

Transpirational Control in C3, C4. amd CAM Plants

Simulation of Selenium Discharge from Subsurface Drainage Systems

Propagation of Juniperus for Conservation Plantings

Collection of Cold Tolerant Opuntia Fruit Clones in Northern Mexico and Their Yield Evaluation in Texas and Israel

In addition and most critically, the University of Illinois is spearheading the organization of an IALC-sponsored workshop planned for early 1994 that is designed to establish benchmark evaluations of the desertification work being conducted around the world and to create systems, whereby, access to that research can be improved. The title of the workshop is currently, ***Biogeochemical Processes Underpinning Restoration Ecology of Arid Lands.***

The research projects can be grouped according to the following IALC research priorities.

Research Funded	1993 IALC Research Priorities				
	H_2O Harvest	Plant Stress	H_2O/Soil Conservation	Genetics Ecophys	Tech Devel/ Transfer
Soil Salinization in Limans	-	X	-	-	-
Patchiness Effects on H_2O Nutrient Flow	X	-	X	-	-
Radar Rainfall Measurements	X	-	-	-	X
Transpiration Control by Soil Moisture	X	X	X	-	-
Selenium Discharge in Subsurface Drainage	-	-	-	-	X
Juniper Propagation	-	-	-	X	-

The FY 1993 funds are allocated to support ongoing research undertaken by the founding participants. Funds are allocated by the Board based on input from an international peer review process under the aegis of the Research Advisory Committee (RAC), whose function is to advise the Consortium Board on individual research projects, training programs, and workshops. The RAC evaluates and prioritizes all research proposals for scientific merit.

Research already underway in their universities also strongly supports the Consortium's objectives. Selected examples include:

The University of Arizona
- *The Utilization of Salt-Tolerant Plants*
- *Farming Systems in Arid Lands*
- *Revegetation of Semiarid Rangelands*

The University of Illinois
- *Foliar Nitrogen Resorption of Nitrogen-Fixing Trees*
- *Chemistry and Bioavailability of Waste Constituents in Soils*
- *Irrigation of Optimum Crop Production and Groundwater Protection*

New Mexico State University
- *Community Stability in Semiarid Ecosystems*
- *Climate Changes in Desert Ecosystems*
- *Restoration of Arid Lands*

South Dakota State University
- *Colloquium on Sustainable Development in Lesser Developed Countries*
- *Tree Selection and Propagation for Drought*
- *Genetic Improvement of Tree Species*

Texas A&I University
- *Development of Cactus for Food*
- *Physiological Response of Shrubs to Nurse Plant Micro-Environments*
- *Vegetation and Soil Moisture Response to Rangeland Disking*

Also, the IALC agrees with Vice-President Al Gore's statement concerning the important work that the Consortium members are undertaking in reclaiming degraded lands and his desire to see the Consortium's model for combatting desertification made available to the developing nations of the world. In order to accomplish this goal, greater resources, both public and private, must be found and public awareness raised. Representatives of the IALC are available to work with the Administration to assist with this effort.

Vice-President Gore has set forth a plan for the development of strategic initiatives aimed at the environment and agriculture in his book, ***Earth in the Balance.*** In essence, these initiatives outline methods by which many competing interests and programs can be reconciled in order to, among other things, encourage sustainable agriculture programs and the conservation of natural resources critical to food and fiber production and the general quality of life. Such issues will also be central matters in many key policy debates both domestically and internationally. As the Vice-President noted:

> *Fortunately, many new, environmentally appropriate agricultural technologies are now available, and these would be promoted [as strategic environment initiatives]. pp. 323-325.*

Specifically mentioned as areas of emphasis are irrigation technology, alternatives to irrigation, low-input crop management resulting in reduced soil erosion, and research and afforestation programs as answers to the problem of desertification. These subjects and related areas are at the heart of the IALC's research efforts.

IALC's overall objectives are also entirely consistent with the scope of activities under the National Research Initiative (NRI), Competitive Grants Program administered by the Cooperative State Research Service. The Secretary of Agriculture has identified several areas as key parts of the Department's agenda to support agriculture through the 1990s. This includes "strengthening of the Nation's agriculture research capabilities..."

IALC research priorities are consistent with NRI's programmatic areas of emphasis: Natural Resources and Environment, Plant Systems, and Processing for Adding Value or Developing New Products. In addition, program areas such as Global Change, Forest/Rangeland/Crop Ecosystem Program, and Energy and Metabolism will be very supportive of IALC research priorities into the 21st century.

Historically, limited resources have been available for such work. Because of the combined expertise of the IALC's members, the funding of this mechanism will build on what has already been accomplished and expensive duplication can be prevented. Thus far the IALC has spent about $750,000 in public and private funds. It is anticipated the annual federal allocations of approximately 3 million dollars would result in the attraction of additional state and private resources matching the figure.

CONSORTIUM OF SOCIAL SCIENCE ASSOCIATIONS
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Testimony of

Howard J. Silver, Ph.D.
Executive Director

Consortium of Social Science Associations
(COSSA)

on the

FY 1994 Appropriation for the

Cooperative State Research Service

United States Department of Agriculture

prepared for the

Subcommittee on Agriculture, Rural Development,
FDA and Related Agencies
Committee on Appropriations
U.S. House of Representatives

Hon. Richard J. Durbin, Chairman

March 24, 1993

Mr. Chairman and Members of the Subcommittee. I am Howard J. Silver, Executive Director of the Consortium of Social Science Associations (COSSA). The Consortium represents over 90 professional associations, scientific societies, and educational institutions, and serves as a bridge between the research community and the Washington policymaking community. A list of our Members, Affiliates, and Contributors is attached to this testimony.

I come before you to discuss the contributions and needs of the social scientists who focus their professional activities on the problems and opportunities facing agriculture and rural America. This is the seventh year we have presented testimony to this Subcommittee and we appreciate the opportunity you have given us to discuss our views of the budget for the Cooperative State Research Service, and in recent years, the National Research Initiative Competitive Grants program (NRI).

COSSA fully supports the NRI administered by the CSRS and is grateful to the Subcommittee for the appropriations in FY 1992 and 1993 to the social science component called "Markets, Trade and Policy (MTP)." This funding was a significant initial step in bringing a national research focus to trade and rural policy issues. However, the $4 million appropriated in both those years is only 4 percent of the total funding for the NRI. This is hardly in proportion to the mix of troublesome social and economic issues facing rural America. Therefore, COSSA recommends that the Markets, Trade and Policy line of the NRI be increased to $13 million in FY 1994.

The description of the MTP part of the NRI in the CSRS solicitation for research proposals includes research expectations across an extremely broad range of subject matter. Under the "Market Assessments, Competitiveness and Technology Assessments" research program, studies are requested to identify, describe, and quantify the size of potential international markets for agricultural products, to determine private or institutional impediments to entry or expansion into international markets, to ascertain the sensitivity of U.S. export activity, to determine deficiencies in the agricultural labor force, to assess the availability of capital and credit, to identify transportation infrastructure problems, and to evaluate the adequacy of technology information.

The "Rural Development" research program seeks studies on how to improve the social and economic well being of rural families and communities, to identify forces that influence population change, employment, wage levels, and other indicators of social and economic viability, to assess the influence of particular agricultural, fiscal, monetary, trade, labor, industrial, and environmental policies and programs, and how to diversify the economies of rural areas. Both these research

programs present a long list of needed information, but very few dollars to provide the information.

COSSA also supports the report language included in FY 1993 by the Senate appropriations committee asking that in each of the other five research components of the NRI, "a portion of the funds provided should be used to help identify the social, economic, and environmental impacts of alternative research directions and to identify research directions consistent with the full range of research goals."

President Clinton has proposed to significantly increase the NRI over the next five years. According to A Vision of Change for America, the administration supports increased funding for the NRI of $188 million over the next four years. The issues studied by social and behavioral scientists through NRI grants are important to the revitalization of rural America the President and the Congress so avidly seek. For example: researchers at Iowa State University are examining the impact of minimum wages on rural retail and service sector labor markets; a researcher at Cornell is probing the impact of small manufacturing firms on rural and regional industrial development; and a researcher at Texas A&M University is looking at the opportunities for entrepreneurship among Mexican-Americans in non-metropolitan areas in the Southwestern United States.

In 1992, COSSA along with the Rural Sociological Society, the Congressional Rural Caucus, and Representatives David Price, Charlie Rose and Rick Boucher, sponsored a congressional seminar on "Rural Policies for the 1990s." At that breakfast meeting, speakers noted the current state of rural America. Ron Wimberley, then-president of the Rural Sociological Society, pointed out that although 62 million Americans are defined as living in rural areas, a record high, only 1 in 15 rural residents lives on a farm. This necessitates the development of a rural policy separate from an agricultural policy.

A recent report by the General Accounting Office Rural Development: Rural American Faces Many Challenges, echoed many of the same arguments made at the seminar: The issues of rural America are issues of human resource allocation, empowerment, economics, "people related" problems such as education and health care, and environmental problems. All of these are addressed by social and behavioral science researchers.

Cornelia Flora of Virginia Tech University and co-editor with Jim Christenson of the University of Arizona of a book Rural Policies for the 1990s, noted that "whereas the 1970s was the decade of rural renaissance and turnaround, the 1980s was the decade of rural decline and turnback."

The decade of the 1980s was one of tremendous change for agriculture and for rural America. The prosperity of previous decades suffered the intrusion of widely reported social, economic, and environmental problems. These included a "farm crisis" in the Midwest, economic and ecological dislocations in the timber-producing Pacific Northwest, malaise in the dairy industry throughout most of the nation, and the continued decline in both farm and non-farm employment in most rural areas.

In 1987, the Experiment Station Committee on Organization and Policy (ESCOP) commented on these trends: "We live in a time when agriculture and the rural economic bases in mining, fisheries, forestry, and natural resource extraction are experiencing major social and economic changes. The farm and rural crises of the 1980s are not short-term aberrations, but symptoms of long-term trends that were partially hidden by the relatively few good times for agriculture and rural areas in the 1970s."

Perceptions of these changes were not lost on the agricultural leadership within the U.S. Congress when it reauthorized the programs of the U.S. Department of Agriculture (USDA) in the "Food, Agriculture, Conservation, and Trade Act of 1990" (FACTA). It said that:

"Federally funded agricultural research and extension programs shall be designed to, among other things, accomplish the following:

-- enhance the long-term viability and competitiveness of the food production and agricultural system;

-- expand economic opportunities in rural America and enhance the quality of life for farmers, rural citizens, and society as a whole;

-- develop information and systems to enhance the environment and the natural resource base upon which a sustainable agricultural economy depends."

Against this background, significant increases might have been expected in funding for social science research focusing on the environmental, health, community, economic, and family problems associated with these trends. This was not the case. Funding for rural and agriculturally related social science research remains below the level sufficient to respond to the problems facing rural America and American agriculture. The problems have changed, but the mix of research and rural development efforts to solve them has not.

Interest in economic revitalization and the restoration of quality of life to all Americans has risen recently and there is

a clamor for change. COSSA recognizes that the competition for federal funding against the need to control spending presents a difficult set of choices for the Congress. However, approximately 30 years ago a USDA report on rural America was entitled "The People Left Behind." The people of rural America are again in danger of being left behind in the promised economic recovery. Support for social science research has not kept pace with emerging rural issues and problems, and it has not kept pace with production research in agricultural plant and animal sciences. It is time to change our investment policy for research focused on rural needs at a national level.

A few words about Special Grants: Because the social science component of the NRI was so minuscule, social scientists examining the problems of rural America, like others, have sought and received special grants. A number of these grants serve a national purpose, impact overall rural policy and involve researchers from many disciplines working together to provide information to help revitalize our nation's rural areas. We think it would be a disservice to eliminate this funding at this time.

These projects include: four regional centers for rural development, judged by a recent panel of experts for their significant accomplishments in coordinating and integrating solutions to regional and multi-state rural development problems and who recommended increased funding; the Rural Policy Research Institute (RUPRI), an interdisciplinary social science research consortium of four universities conducting quick turn-around research and long-term basic studies of rural communities and the rural economy; the Food and Agriculture Policy Research Institute, a two university center that helps the RUPRI integrate general rural policy and farm policy issues.

Finally COSSA endorses funding for a new initiative on "Strengthening the Rural Work Force." This research program would help link research on rural families and communities to the current Youth-at-Risk extension program. It would help not only education and intervention programs, but also business and public planning initiatives. The key national issues driving this initiative are: keeping jobs and skilled workers in rural and agricultural areas; assuring stability and development of families and youth in a multicultural society; and maintaining and utilizing the productive capacity of the aging population.

Questions to be addressed by this initiative include such critical issues as developing the work ethic in economically deprived rural families, identifying the job skills necessary to add value to the processing of agricultural products, and assessing the impacts of demographic trends, diversity, employment, and earnings in local and regional rural economies. We request funding of $6 million for this initiative as a Special

Grants to be administered through a nationally competitive CSRS program.

In a recent statement the Board of Agriculture of the National Association of State Universities and Land Grant Colleges advised the new Secretary of Agriculture: "The extension, research and education efforts of the USDA should emphasize rural development and revitalization as well as an environmentally sound and internationally competitive production agriculture. The USDA must now respond to the greater and more complex issues of agriculture, environment, and social/economic rural infrastructure." The social and behavioral science research agenda for rural America fits squarely with this advice. It deserves significant Congressional support.

Thank you for the opportunity to present our views.

MEMBERS

American Anthropological Association
American Economic Association
American Historical Association
American Political Science Association
American Psychological Association
American Sociological Association
American Statistical Association
Association of American Geographers
Association of American Law Schools
Law and Society Association
Linguistic Society of America

AFFILIATES

American Assembly of Collegiate Schools of Business
American Association for Public Opinion Research
American Educational Research Association
American Society of Criminology
Association for Asian Studies
Association for Social Sciences in Health
Association of Research Libraries
Eastern Sociological Society
History of Science Society
International Studies Association
Midwest Sociological Society
National Council on Family Relations
National Council for the Social Studies
North American Regional Science Council
North Central Sociological Association
Operations Research Society of America
Population Association of America
Rural Sociology Society
Social Science History Association
Society for Research on Adolescence
Society for Research in Child Development
Society for the Advancement of Socio-Economics
Society for the Scientific Study of Religion
Society for the Scientific Study of Sex
Southern Sociological Society
Southwestern Social Science Association
Speech Communication Association
The Institute for Management Sciences

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Social Science Research Council
University of Southern California
State University of New York, Stony Brook
Temple University
University of Tennessee
University of Texas, Austin
Texas A & M University
Tulane University
University of Washington
University of Wisconsin, Madison
University of Wisconsin, Milwaukee
Yale University

STATEMENT OF

Sinthya Penn, President
Beneficial Insectary

to the

HOUSE APPROPRIATIONS SUBCOMMITTEE
ON AGRICULTURE, RURAL DEVELOPMENT
AND RELATED AGENCIES

Personal Profile:

President (1986 to present) of Beneficial Insectary, an established commercial predator/parasitoid production facility since 1978.

Credentials include: Certified Pest Control Advisor, Certified Pest Control Applicator, with a degree in Entomology from Texas A&M University.

Ten years of field experience includes releasing predators and parasitoids, monitoring and consulting growers on a seasonal basis; an additional five years of consultation to private crop consultants and growers regarding their use of predators and parasitoids. International consultation is now oriented towards customized programs for growers or cooperatives to include field efficacy data in order to provide comprehensive pest management programs for long-term results.

Business Profile:

Beneficial Insectary (BI) is an established commercial predator/parasitoid company with year-round production. The company was founded in 1978 for the production and sale of parasitoids used in filth fly control (confined livestock and poultry). Under new ownership in 1986 the company expanded to meet the needs of producers and consultants for other beneficial organisms. Supplying natural enemies for crop protection (field, row, orchard, greenhouse) is now a major function of the company.

Industry Profile:

The potential for implementing augmentative biological control programs in many mainstream agricultural crops is now very great. However, the ability of the biological control producers in this country to produce a reliable supply of quality natural enemies is limited. The industry is comprised mostly of small companies struggling to expand with limited capital and often primitive rearing technology. Very little research at the federal and university level has been devoted to mass production of natural enemies. Since the products we produce are not genetically modified nor synthesized in a company laboratory, they are not patentable. Mass production development costs cannot be

protected and it is difficult to recover these costs. Also, our product sales are seasonal and do not have a significant shelf life, therefore, profit margins are lower than with patented products that have an extended shelf life.

Another area of concern is the lack of field efficacy data. Although of major importance, industry cannot afford the cost of extensive field testing. Companies should be allowed to continue the practical application of these non-toxic natural enemies without undue regulations while cooperating with governmental and university agencies to properly evaluate field results. This particular area of biologicals (predators and parasitoids) must be viewed separately from micro-organisms and genetically altered material. Again, financial constraints of small companies are a major factor. The industry is, nevertheless, growing rapidly and I expect that as a group, we will be able to support future research projects.

For now, however, I feel it is very important for public agencies such as the USDA to expand their involvement in both research and development of these (natural enemies) and other biological control products and help related industries to cope with selected gaps in the scientific, technical, and regulatory-related knowledge base.

The need for some policy changes has become increasingly important. These changes would support and encourage the commercial development, production and delivery of biologically based and environmentally compatible products and methods for pest management. Attention in this matter is quite urgent. Therefore, I respectively ask that funds be provided to address these issues.

We are all aware of the current budget constraints. However, it is my understanding that the Administration has requested additional funds for FY 1994 for integrated pest management (IPM) and biological controls and for minor-use pesticide clearance. I strongly feel that $500,000.00 should specifically be appropriated to the Beltsville Agricultural Research Center to assist in the development of biologically based methods for control of insect pests of crops.

STATE OF CALIFORNIA — PETE WILSON, Governor

DEPARTMENT OF FOOD AND AGRICULTURE

1220 N Street, P.O. Box 942871
Sacramento, CA 94271-0001

April 15, 1993

Post-it ® brand fax transmittal memo 7671	# of pages ▸ 3
To John N.	From
Co.	Co.
Dept	Phone #
Fax #	Fax #

Mr. Richard J. Durbin, Chairman
House Appropriations Subcommittee
on Agriculture
129 Cannon House Office Building
1st and Independence Avenue, S.E.
Washington, DC 20515

Dear Mr. Chairman:

Due to prior commitments, I am unable to give my testimony in person. Attached is my testimony in support of the $3.4 million augmentation to USDA-APHIS-International Services budget to establish a pest-free zone along the U.S./Mexico border.

If you have any questions, please feel free to call.

Sincerely,

Henry J. Voss
Director
(916) 654-0433

Attachment

TESTIMONY
OF
HENRY J. VOSS
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
RURAL DEVELOPMENT, AGRICULTURAL AND RELATED AGENCIES
APRIL 20, 1993

Mr. Chairman:

My name is Henry Voss, Director of the California Department of Food and Agriculture, and I am representing Governor Wilson in support of the $3.4 million augmentation to USDA-APHIS-International Services budget to establish a pest-free zone along the U.S./Mexico border.

Mexican fruit fly, Anastrepha ludens, ranks as the second most destructive pest of fruits and vegetables after the Mediterranean fruit fly. It attacks over 50 host crops, many of which are grown commercially and in backyards all over the state. It is estimated that the economic impact of the Mexican fruit fly, if permanently established in California alone, would be about $200 million annually.

The insect is also a persistent and serious pest of fresh fruit in commercial and homeowner orchards throughout much of Mexico and the Rio Grande Valley of Texas. All the sunbelt states are vulnerable to infestations by this devastating pest. The farther south we can push the Mexican fruit fly problem, the more American agriculture is protected. It is mutually beneficial to both Mexico and the U.S. to eradicate the existing infestation of Mexican fruit flies along the international border and establish a pest-free zone thereafter.

Just as a pest-free zone has already been established in the Mexican State of Sonora, from which commercial shipments of apples, oranges, and peaches can enter the U.S. without fumigation treatments, Mexico's Secretary of Agriculture and Water Resources (SARH) is working to develop a comprehensive eradication plan for the northern tier of states with priority on Baja California.

California does not have a reliable source of sterile Mexican fruit flies for use in emergency eradication projects. The only sterile Mexican fruit fly (Mxfly) rearing facility with which California has any working agreement is the United States Department of Agriculture (USDA) facility in Mission, Texas. That facility has a capacity of rearing 80 million sterile flies per week and is primarily committed to Mxfly suppression in Texas' Rio Grande Valley citrus production area.

In recent years, the Mxfly has been found with regularity in Tijuana, Mexico; and the international border is no physical barrier to the natural spread of the pest into California. The pest can also be spread artificially by people traveling between the two areas; and the USDA's agricultural quarantine inspection program at the international border is focused primarily on commercial traffic. Private citizens of the U.S. visiting Tijuana and Mexican

citizens visiting the U.S. can unintentionally transport the Mxfly both as adult fertile flies hitching a ride in cars and as maggots infesting host fruit purchased in Mexico and carried to Arizona, California, New Mexico, and Texas.

The recent experience with eradication of the 1989-90 Mediterranean fruit fly infestation in Southern California makes it abundantly clear that the public will not tolerate multiple aerial malathion-bait spray treatments, so California must make arrangements for a reliable supply of high quality sterile Mxflies for eradication purposes. A supply of at least 100 million sterile flies per week is needed.

Mexico is about to construct a new sterile fruit fly rearing facility this year at Metapa, State of Chiapas. The facility will have a capacity of 150 million sterile flies per week. The sterile flies from this facility will be used to establish and maintain fruit fly-free zones in the northern tier of Mexican states. The State of California plans to contribute $400,000 for the purchase of equipment and $500,000 annually to share the cost of operating the facility in Metapa.

The sterile fruit fly rearing facility and pest-free zone along the U.S./Mexico border are good investments for the United States. Historically, each time a Mexican fruit fly infestation has occurred in California, or any other sunbelt state, as much as $50,000 to $100,000 has been spent on delimitation trapping for a single fly, and an infestation can cost $1.0 million or more.

If the USDA-APHIS FY 1994 budget is augmented by $3.4 million for operational costs and technical assistance, the pest-free zone concept can become reality. The plant protection agencies are ready to enter into this international effort if the U.S. Congress directs the USDA and appropriates $3.4 million annually, beginning FY 1994. The $3.4 million spent per year to assure a pest-free zone would be the proverbial "ounce of prevention." The preventive approach has an additional advantage in that it minimizes pesticide use and is environmentally sound, as well as far more publicly acceptable. It makes sense biologically and environmentally for the U.S. and Mexico to enter into a partnership for the establishment of a pest-free zone across the northern tier of Mexican states

PURDUE UNIVERSITY

OFFICE OF THE DEAN OF AGRICULTURE

March 31, 1993

The Honorable Richard J. Durbin
House of Representatives
2463 Rayburn House
Washington, DC 20515

Dear Congressman Durbin:

Enclosed is a written testimony for the record prepared by Mr. Arnold E. Denton. Requesting that the committee consider federal funding for the Advanced Food Manufacturing Alliance.

We appreciate the opportunity to submit this statement.

Sincerely,

V L Lechtenberg

V. L. Lechtenberg
Executive Associate Dean of Agriculture

VLL/cb

c: A. E. Denton
N. Cattell

AGRICULTURE

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Statement
for
Committee on Appropriations

Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Subcommittee on Appropriations

Mr. Chairman and members of the subcommittee, my name is Arnold E. Denton. I am former vice president for research at Campbell Soup Company and I would like to take this opportunity to address a critical need in the food processing, packaging and manufacturing system in the United States.

We are on the verge of nothing less than a major revolution in the way crop and livestock raw materials are converted to breakfasts, lunches, and dinners--and how food products are packaged for convenience and attractiveness. Changing life styles are creating rapidly growing demands for convenience, safety, and nutrition. Meeting these market demands poses tremendous challenges for those who process, package, store, and transport food products. The major food processing companies and the research universities of the Midwest request your consideration for federal support for research and experimentation on advanced food processing and packaging.

The 1990s brought a reordered world political scene, bringing unprecedented opportunities for trade. As the former centrally planned economies grow, the opportunities for trade in high value food products will increase exponentially. Competition in lower value commodity production will be increasingly keen dictating that the future of the U.S. food system lies in its ability to compete in technology driven, high value food products and services.

New technologies, including biotechnologies, electronic sensors, and computer integrated processing procedures, offer the potential to meet these challenges. It is now possible to tailor foods to meet specific nutrition and health requirements, better satisfy consumer convenience needs, and meet a vast array of ethnic preferences. Applications of new technologies hold the key and, today, U.S. technology lags that of other countries in several key areas. Food processors face the same challenges in quality control and processing efficiency that are faced by manufacturers in other industries. New processing, packaging, and storage technologies are needed to assure the competitiveness of this industry into the next century.

As the Congress and the Clinton Administration address industrial competitiveness, it is essential that the competitiveness of the food industry not be overlooked. Based on the value of shipments, food processing is the largest

manufacturing industry in the U.S. The food industry contributes about 20% of the U.S. Gross Domestic Product. From farm to market, it employs 14 million people and provides an additional 4 million jobs in related industries. More than 1.5 million people are employed in food processing alone.

Closer relationships are needed between university and industry to assure that scarce research and development resources are expended on highly relevant problems. The proposed Advanced Food Manufacturing Alliance is a cooperative undertaking by several Midwest universities in cooperation with food processing companies. The purpose is to speed the development of new processing and food safety technologies to more competitively produce food and non-food products from U.S. crops and livestock.

Industry will provide significant leadership in the Alliance. Corporate managers know the market, they know the goals that must be reached if the U.S. is to be a world leader in the food industry. Universities will bring scientists in engineering, business, science and agriculture to the partnership. Industry scientists will continue to use their best efforts to develop new applications. University scientists will work to acquire the knowledge necessary to create the next generation of frozen and dehydrated foods and on other means of preservation that can give easy-to-prepare, appetizing and nutritious products.

Five million dollars requested for this program in fiscal year 1994 which will be matched with non-federal funds. State, university, and industry funds make up the match. Federal funds are essential to pull the participants together across state lines and across corporate lines. All research projects will be merit reviewed to help assure high quality science.

The partner universities include the members of the Midwest Universities Alliance: Purdue University, Ohio State University, Indiana University, University of Missouri, Iowa State University, University of Minnesota, and the University of Wisconsin. Food processing companies, small and large, in each of these states are also participating in this research effort.

I urge the subcommittee to give serious consideration to this proposed program. Especially in times of restrained budgets it is critical to invest in research and new technology development. Failure to do so compromises the future competitiveness of this important industry.

NASULGC National Association of State Universities and Land-Grant Colleges

April 22, 1993

The Honorable Richard J. Durbin
U. S. House of Representatives
129 Cannon House Office Building
Washington, D.C. 20515

Dear Representative Durbin:

Enclosed is a statement in behalf of this association commenting on the FY 1994 appopriation for the United States Department of Agriculture. This is to request that the statement be included in the hearing record.

Thank you very much.

Cordially,

C. Peter Magrath
President

CPM/aph
Enclosure

One Dupont Circle, NW Suite 710 • Washington, DC 20036-1191 • (202) 778-0818 • Fax (202) 296-6456

NATIONAL ASSOCIATION OF STATE UNIVERSITIES
AND
LAND-GRANT COLLEGES

Statement for the record of the House Appropriations Subcommittee on Agriculture, Rural Development and Related Agencies:

C. Peter Magrath, President
April 23, 1993

I am grateful for this opportunity to submit a statement for the record of the Subcommittee. My comments will address the indirect cost limitation on project grants associated with the National Research Initiative (NRI), which was known in earlier years as the Competitive Grant Program.

First, before addressing the issue of indirect costs, the members of the National Association of State Universities and Land-Grant Colleges (NASULGC) wish to thank the Subcommittee for its strong support of the Competitive Grant Program since it was first funded by this Subcommittee in 1978. The Department of Agriculture has reported to the Subcommittee that research under the program is of uniformly high quality, and the Subcommittee has responded each year with significantly increased financial support. We are grateful to the Department for its reports, and we are grateful to the Subcommittee for its response.

A little history will be useful. The Competitive Grant Program was first funded, as we said, in 1978. In 1991, the Program became the National Research Initiative which continues to this day. The indirect cost cap (at 25 percent) was first imposed on the Competitive Grant Program in 1990. Then in 1991 the cap was reduced to 14 percent, and that coincided with the first year of NRI funding.

In our testimony last year, we explained that the indirect cost limitation is simply another form of mandatory cost-sharing. For example, if a university has a rate of 50 percent (the national average) and if a resident scientist is awarded a grant in the amount of $100.000, the university is forced to find $20,730, or more than a fifth of the grant, to defray the indirect costs that the government failed to provide. Indirect costs are real costs; they are the costs of utilities, buildings, scientific apparatus, compliance with hazardous waste disposal and with occupation safety and health rules, and administration. These expenditures must be met; they are neither frivolous costs nor are they optional.

The university pays for indirect costs whether or not they are reimbursed. If the university is not reimbursed, the money comes from other sources; for example, university funded research, student aid, faculty salaries. The cap saves money for the government, but it weakens the universities; that is not a wise trade.

For the record, it should be noted that cost-sharing is built in to the federal indirect cost reimbursement system. For example, OMB's Circular A-21, Cost Principles for Institutions of Higher Education, does not allow agencies to reimburse institutions for the full cost of facilities: buildings are amortized over fifty years whereas their actual usable life is more nearly twenty to thirty years. Thus, even when federal agencies pay full indirect costs, the universities are required to cost-share.

To put the issue in its Departmental perspective, USDA has a long history of supporting research. It goes back to 1887 and the passage of the Hatch Act. The formula grant funds that support research in the Agriculture Experiment Stations do not provide for indirect costs, but those grants are matched by non-federal funds. The matching funds pay for research infrastructure (those goods and services which indirect costs support in competitive grant programs.) In addition, most special research grant funds support only the direct costs of research, not indirect costs. But special grants address local and state problems where extra cost-sharing is appropriate. Grants under the NRI (as well as competitive special grants), pay indirect costs because the benefits are national or regional in scope. The results of research under these programs are intended to benefit the region and/or the nation as a whole, not just a single university.

In our testimony last year, we explained why universities continue to seek research grants even though there is an indirect cost limitation, and we emphasized that the quality of research is not a risk. WE said, as we have said here, that the consequence of the cap is a weakened university. That doesn't help the government, or universities, or research, or our students.

We are not privy to the reasoning of the Subcommittee in 1990 when indirect costs were limited to 25 percent, or when the cap was reduced to 14 percent in 1991. We do know that matters were made worse when abuses were found in certain universities. Those abuses were quickly corrected and OMB published a list of unallowable costs so that wrong-doings could not be repeated. OMB also imposed a limitation on the administration costs that agencies may reimburse. (Another form of cost-sharing for many universities.) The 26 percent cap on administration is a real burden for some universities, but it serves as an incentive for universities to control costs.

67-181 O—93——36

To Summarize: Government-wide rules require cost-sharing by all universities that receive federal research grants. The 14 percent cap, however, imposes an abnormally heavy burden because it requires cost-sharing at an extraordinarily high level. The nation's research universities are now better stewards and it is time that our relations with USDA return to normal as they have with all other agencies of government.

Once again, in behalf of the members of our association, I want to thank the members of the Subcommittee for their support of the National Research Initiative and, indeed, for their support of all of the programs in the Department that enable our universities to serve the needs of agriculture and the people of the nation.



1866

THE AMERICAN SOCIETY FOR THE
PREVENTION OF CRUELTY TO ANIMALS

National Legislative Office
1755 Massachusetts Ave. N.W.
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(202) 232-5020
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STATEMENT FOR THE RECORD

**House Appropriations Subcommittee on
Agriculture, Rural Development, Food and Drug Administration
and Related Agencies**

FY 1994 APPROPRIATIONS:

**Animal Welfare Act
Organic Foods Production Act
National Organic Standards Board
Low-Input Sustainable Agriculture Research and Education Programs
Animal Damage Control Program**

April 23, 1993

Mr. Chairman, The American Society for the Prevention of Cruelty to Animals (ASPCA), on behalf of its nearly $400,000 contributors nationwide, appreciates this opportunity to share its views concerning appropriations for programs of particular interest to The ASPCA.

Founded in 1866 by Henry Bergh, The ASPCA is this country's first humane society dedicated to the elimination of unnecessary pain and suffering for animals whether found in the wild, laboratories, zoos, circuses or other exhibitions, kept as pets or raised for food. It is with this mission in mind that we encourage you to support a funding level of $23 million for enforcement of the Animal Welfare Act, $200,000 to be used to carry out the Organic Foods Production Act authorized by the Congress in the 1990 Farm Bill and $40 million to further expand the scope of the Low-Input Sustainable Agriculture Program.

As you know, the Animal Welfare Act is the only comprehensive law providing minimal standards of care to warm-blooded animals used or intended for use in experimentation, research testing, exhibition, or as pets. The Animal and Plant Health Inspection Service (APHIS), required by law to enforce this Act, is negligent in its responsibilities. The Office of the Inspector General issued a recent report concluding that APHIS is incapable of ensuring humane care and treatment of animals at dealer facilities because they neither routinely inspect nor enforce correction of violations if found during inspections. The situation continues to deteriorate as the number of research facilities, animal exhibits dealers, intermediate handlers and carriers all requiring inspections rises. With only 86 inspectors to do the job, we believe it is impossible to ensure adequate care for the number of animals covered by the Animal Welfare Act (AWA) across the entire country. In addition to the almost 1,500 research facilities with nearly 3,500 separate sites, these inspectors are responsible for inspecting zoos, circuses, traveling shows, animal dealers, puppy mills, animal carriers and handlers. The task is enormous and whole segments are simply ignored by APHIS. The ASPCA has been very critical of APHIS in the past because of their inaction and general malaise in responding to that for which they are reponsible. While we feel that the role of APHIS as the agency charged with AWA enforcement should be reviewed, we nevertheless encourage you to approve a level of funding consistent with the requirements of the law. We were pleased to learn that U.S. District Court Judge Richey found the final regulations under the AWA promulgated by the USDA for the exercise of laboratory dogs and the well-being of laboratory primates to be unsatisfactory and ordered prompt promulgation of sound regulations. The Court ordered the USDA to act "with all deliberate speed" in the rewrite. The ASPCA urges that no further money be made available to the USDA to continue litigation in this regard. The Congress directed the USDA in 1985 to write these regulations; the time has come for the writing of effective regulations.

The ASPCA was supportive of two important provisions contained in the 1990 Farm Bill that together represent an innovative approach to farming. We believe that more attention must be given to farming systems that are ecologically balanced and safe to the environment and the consumer while humane to animals. Thus, we ask for an appropriation of $780,000 for implementation of the program and $150,000 for the National Organic Standards Board. It is critical to the long-term viability of the organic certification program to expend funds this year. Last year no money was made available for implementation and only $15,000 was given to the Board. This is a meager amount to fund a newly-formed Board with general start-up needs and meeting requirements.

In addition, we request an appropriation of $40 million for the Low-Input Sustainable Agriculture Research and Education Program. The ASPCA has stated for some time that animal husbandry practices which depend on subtherapeutic doses of antibiotics and other drugs have the potential to threaten the health of the consuming public, the environment and the health of the animals. Therefore, we are happy to support a Federal research and education program that focuses on sustainable agriculture. It is a unique, well-developed program allowing for an exchange of information among producers, public agencies and private researchers and deserves your support.

Finally, we request that you ask the USDA to devote a substantial portion of FY 94 operational funds to the Animal Damage Control (ADC) Program for the use of non-lethal techniques. We are concerned by the continued reliance on lethal methods of control such as killing by aerial hunting, trapping and poisoning. ADC researchers have developed a number of techniques which show great promise. We therefore ask that a minimum of 70 per cent of funds allocated to ADC research be devoted to the identification and development of non-lethal damage control techniques.

In sum, we appreciate the opportunity to share our views with this Subcommittee. We are committed to working with you in a partnership toward eliminating the pain and suffering of all animals.

RUPRI
Rural Policy Research Institute

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April 22, 1993

The Honorable Richard Durbin, Chairman
House Appropriations Subcommittee on Agriculture
2362 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Durbin:

We are writing to express support for increasing the FY 1994 budget of the Economic Research Service of the United States Department of Agriculture from the proposed reduction to $51.8 million in the President's Budget. This significant reduction in current ERS program support, along with projected FY 94--FY 97 budget cuts of over $59 million, will undoubtedly deteriorate the quantity and quality of ERS information provided to decision makers, both within and outside the federal government. As you are well aware, effectiveness of public and private sector planning begins with access to quality information.

The Rural Policy Research Institute (RUPRI) has a particular concern regarding this issue, as RUPRI concentrates on linking the best available science with policy decision making regarding policy impacts upon rural people and places. The data and analyses provided by the ERS are critical resources for understanding the problems and potentials of rural people and places. For example, Rural Development Perspectives and Rural Conditions and Trends, are among the finest publications addressing rural concerns. ERS analysts are regularly consulted by RUPRI regarding rural data issues. Decreased ERS capacity will lower the effectiveness of all institutions such as RUPRI, that work in complementary fashion with ERS.

The most critical issue here is the availability of objective information regarding rural people and places. That body of knowledge will deteriorate should this significant program downsizing occur. We appreciate the opportunity to express our views on this concern, which is an important one for rural people and places, and organizations such as ours, which seek to understand and serve them.

Sincerely,

Charles W. Fluharty
Director

Glenn L. Nelson
Research Coordinator

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(501) 575-2358
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University of Nebraska
Lincoln, Nebraska 68583-0922
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Supporting Statement Concerning

FY 1984 APPROPRIATION FOR THE ECONOMIC RESEARCH SERVICE, UNITED STATE DEPARTMENT OF AGRICULTURE

Submitted to

The Honorable Richard Durbin, Chairman
House Appropriations Subcommittee on Agriculture

by

Charles W. Fluharty, Director
Glenn L. Nelson, Research Coordinator

Rural Policy Research Institute

Position Summary

We are writing to express support for increasing the FY 1994 budget of the Economic Research Service of the United States Department of Agriculture from the proposed reduction to $51.8 million in the President's Budget. This significant reduction in current ERS program support, along with projected FY 94--FY 97 budget cuts of $59 million, will undoubtly deteriorate the quantity and quality of ERS information provided to decision makers, both within and outside the federal government.

Importance of Quality Information/Scientific Analyses Regarding Rural Impacts

The current social, economic, and technical change occurring in our country is constantly accelerating, and assures an even greater need for science-based information and sound analyses on policy alternatives. These changes must call into question decisions based upon simple rules-of-thumb rooted in historically applicable frameworks. For example, international trade, reform in our health care and educational systems, continued technological change, and continued aging of the post-war "baby boom" generation all demand ongoing systematic analyses to arrive at informed private and public sector decisions regarding rural people and places.

Importance of the Economic Research Service

The Economics Research Service (ERS) fills a critical niche in the system of information about, and for, rural people and places. Its role is unique and could only be duplicated by others with significant time delays and large expenditures of funds.

ERS plays a major role in the interpretation of socioeconomic data. For example, the Current Population Survey (CPS) is a large monthly survey that provides important information on the employment status and other measure of well-being of U.S. citizens. ERS analysts provide greater insight into the well-being of rural people by subjecting the nonmetropolitan portions of the CPS to more intense scrutiny than does the Census Bureau that conducts the survey. This illustrates the general principle that "raw data" becomes an important part of this analytic and interpretative function for rural people and places.

ERS has unique characteristics that are not easily replaced by other institutions. ERS is sufficiently large to integrate and synthesize large volumes of materials that are difficult or impossible for other organizations to absorb in their entirety. For example. the reports in the "Strategies for the 1990's" series and Rural Economic Development in the 1980's are useful syntheses of large bodies of materials. ERS is located in close proximity to the agencies that collect primary information, and this facilitates the effective linkage of data and analysis. For example, analysts in ERS can regularly and cost-effectively meet with their counterparts collecting information in the CPS and the Population Census.

Complementarity of the Economic Research Service

ERS fills a critical role in the larger system of institutions that serve rural people and places. ERS cannot do all things as well as other institutions, and ERS personnel appreciate the importance of complementing the work of others. ERS analysts are in close contact with people in the numerous institutions that serve rural people throughout the nation, including state and local decision makers, cooperative extension workers, opinion leaders in rural areas, and analysts in universities.

A decrease in the capacity of ERS would lead, in turn, to a decreased capacity of those people in institutions that rely on ERS to fill its niche in the system of institutions that serve rural people and places. This applies, not only to RUPRI, but to these many other institutions, as well.



Food and Agricultural
Policy Research Institute

April 22, 1993

Chairman Durbin
House Appropriations Subcommittee on Agriculture
2362 Rayburn HOB
Washington, DC 20515

Dear Chairman Durbin:

Enclosed herewith is testimony for the record in support of appropriations for the Economic Research Service and Foreign Agriculture Service (FAS) of USDA. FAPRI-Missouri institutionally and individuals here have healthy experience with both organizations and can attest to the value and importance of the data, analysis and people resources present. As we provide policy analysis options requested by Congress, we often rely on the resources of ERS and FAS and outline our assessment in the following testimony letter.

We find them valuable and urge their continued adequate support.

Sincerely,

Robert E. Young
Co-Director
FAPRI

Abner W. Womack
Co-Director
FAPRI

Center for National Food and Agricultural Policy
Department of Agricultural Economics
University of Missouri-Columbia
Columbia, Missouri 65211
314-882-3576

CARD/Center for Trade and Agricultural Policy
Department of Economics
Iowa State University
Ames, Iowa 50011
515-294-1183

FAPRI
Food and Agricultural
Policy Research Institute

April 22, 1993

The Honorable Richard Durbin, Chairman
House Appropriations Subcommittee on Agriculture
2362 Rayburn HOB
Washington, DC 20515

Dear Chairman Durbin:

This letter is written to express our support of the Economic Research Service (ERS). It has come to our attention that the agency has been targeted for significant budget cuts in the upcoming fiscal year. We feel that ERS provides a vital service to agriculture by gathering and analyzing data.

In its data gathering mode, ERS represents a primary source of information on a variety of fronts. The Farm Cost and Returns Survey, but one example of ERS activity, provides critical information on farm financial conditions, distribution of debt, costs of production and a wealth of other information not available from any other source.

In its analysis mode, ERS represents a group of researchers that continually monitor and evaluate the data needed to make farm policy decisions and to conduct international trade analysis. The Outlook and Situation effort of ERS provides the starting point for nearly all private and academic forecasters. ERS staff outside of the data generation or the Outlook and Situation area contribute to the policy decision process. Whether the question is on wine production, conservation concerns or the effects of macro-economic changes on agriculture, ERS has the in-house expertise needed to generate answers.

FAPRI receives requests from Congress on a regular basis to evaluate alternative farm policy options. In nearly every case, we will cross check our work with individuals within ERS. In nearly every case, ERS has the staff on hand to help in our effort.

ERS has a number of critics in and out of government. We would like to make sure that there is at least one vote of support and confidence in ERS expressed in this appropriations cycle.

Center for National Food and Agricultural Policy
Department of Agricultural Economics
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CARD/Center for Trade and Agricultural Policy
Department of Economics
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The Foreign Agricultural Service (FAS) also provides a significant body of knowledge on the international front. From trade negotiations to knowledge of markets in other countries, FAS provides the day-to-day information and experience base agriculture needs. Here again, as we receive requests from Congress to conduct analysis, we will frequently cross-check with FAS to confirm, or at least critique, our results. FAS also is very deserving of support.

Sincerely,

Abner W. Womack
Co-Director
Food and Agricultural
Policy Research Institute

Robert E. Young II
Co-Director
Food and Agricultural
Policy Research Institute

TESTIMONY SUBMITTED
BY
DR. KENDALL BAKER
PRESIDENT, UNIVERSITY OF NORTH DAKOTA

TO

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
FOOD AND DRUG ADMINISTRATION AND RELATED AGENCIES
HOUSE APPROPRIATIONS COMMITTEE

IMPACTS OF AGRICULTURAL CHEMICALS ON GROUNDWATER QUALITY IN THE NORTHERN GREAT PLAINS

PROJECT SYNOPSIS

Description

The University of North Dakota (UND) requests $1.0 million in FY94 for the "Impacts of Agricultural Chemicals on Groundwater Quality in the Northern Great Plains" program for the UND Energy and Environmental Research Center (EERC). The objective of this groundwater research program is to understand the occurrence, transport, and fate of agricultural chemicals in representative settings so that we can apply that understanding to conserve and protect our critical irrigation and drinking water resources, increase agricultural efficiency, improve chemical management practices, and provide a scientifically valid basis for meaningful regulation of agricultural chemicals.

APPROACH

Abundant, good quality water is critical to maintaining the high quality of life to which we have become accustomed. Groundwater provides for the water needs of 90% of our rural population and 50% of our urban population and accounts for 99% of our total freshwater resource. This research program focuses on the impacts of agricultural chemicals on our groundwater, because groundwater is the medium for subsurface chemical reactions and contaminant transport and because groundwater is particularly vulnerable to contamination from a wide variety of activities, including agriculture. Our approach to understanding the occurrence, transport, and fate of agricultural chemicals in the groundwater environment and ultimately applying that understanding in a practical manner demands research within the complete environmental context. That context includes the climate, the three-dimensional matrix of earth materials, the water flowing over and through those earth materials, and the behavior of substances such as agricultural chemicals that may be introduced into the landscape. Even though 99% of our water resource is below the water table, most agronomic research has focused on near-surface root-zone processes high above the water table, and traditional hydrologic research has concentrated on surface water, leaving a critical gap in our understanding of groundwater vulnerability. This research program bridges that gap and is providing data critical for understanding the occurrence, transport, and fate of agricultural chemicals along the entire pathway from land surface, through the root zone, downward to the water table, and ultimately through the saturated zone from which we draw drinking and irrigation water.

MAJOR FINDINGS

Key findings from the current research program, significant to both the agricultural industry and regulatory agencies, are briefly summarized below.

Shallow Aquifer Denitrification

Nitrate contamination of water resources has been recognized as a widespread problem largely attributable to agricultural practices. Research focused on the resolution of this issue was conducted at the Elk Valley aquifer in northeastern North Dakota, an important source of irrigation and drinking water for farms and rural communities in the area. Nitrate was found to be present in the upper three meters of the aquifer. Naturally occurring denitrification in the aquifer was found to be responsible for the decreasing concentration of nitrate with depth, confirming the existence and function of a natural mechanism for remediation of nitrate contamination due to agricultural nitrogen inputs. We now know where the nitrate is, how much there is, how it got there, how and why it is behaving in this manner, and how it moves, all of which provide the foundation for prevention and management of the problem.

Understanding nitrate distribution in an aquifer and the processes affecting nitrate occurrence can result in pollution prevention practices for water-well systems, as well as design and operation of wells to minimize the withdrawal of contaminated water. Excessive nitrate concentrations in groundwater can be an indicator to unnecessary and excessively costly applications of fertilizer, practical knowledge of which may provide for cost-effective reductions in application rates. Because nitrate is found in a distinct horizon of the aquifer, it may be possible to intentionally withdraw and use nitrate-rich water for irrigation, reducing the costs of applying additional fertilizer. These findings have generic applicability to other regions of the country with similarities in climate, geology, hydrology, and agricultural practices. Thus understanding from one carefully designed and executed experiment has management implications for glacial aquifers in North Dakota, Montana, South Dakota, Minnesota, Wisconsin, Michigan, New York, New Hampshire, Vermont, Massachusetts, and Maine.

Effects of Irrigation Pumping Practices on Groundwater Quality

Irrigation is often cited as a factor in the degradation of water quality because increased movement of water through the landscape creates opportunities for movement of fertilizers and pesticides downward to the water table. Existing agronomic and hydrologic research has emphasized root zone and surficial water at the expense of the key groundwater component. For example, nitrate contaminant plumes have been observed downgradient from irrigation wells across the country, but an objective explanation has been virtually nonexistent. The EERC research focused on determining the effect of irrigation pumping on groundwater flow and quality in a glacial aquifer. The research was based on water quality determinations in the vicinity of a typical irrigation well. Aquifer behavior during pumping was simulated with field-validated computer modeling to provide a three-dimensional understanding of groundwater flow and chemical movement in response to actual irrigation of a potato crop.

Results demonstrated that cyclic irrigation pumping can alter groundwater flow patterns and redistribute nitrate and other chemical contaminants vertically to the total depth of the aquifer because of hydraulic stresses induced during pumping. This occurs because mixing of water from all levels of the aquifer occurs in the vicinity of the well. When pumping stops, the mixed water can then move downgradient in plumes of contaminated groundwater. This chain of events can move nitrate and other chemical contaminants into deeper regions of the aquifer. Deep, long-term nitrate contamination may result in deeper portions of the aquifer where naturally occurring denitrification cannot occur.

These results have widespread implications because current management practices do not address the effect of irrigation system operations on groundwater flow and contaminant movement. Where intensive irrigation of farmland occurs, as in Nebraska, Kansas, Oklahoma, Texas (High Plains Ogallala aquifer), and North Dakota, present pumping practices may be responsible for nitrate and other chemical contamination deep in the aquifers. Surveys for agricultural chemical contamination of groundwater commonly utilize high-capacity wells, such as municipal and irrigation wells in their sampling strategy. Results of this study indicate that these wells may provide misleading data in that measured nitrate concentrations do not truly reflect aquifer conditions. However, this new understanding of aquifer behavior in response to irrigation pumping can lead to tailored pumping practices which eliminate or minimize adverse effects of cyclic pumping, while still reaping the benefits of irrigation. Individual farmers and agencies, including the North Dakota State Water Commission and the U.S. Geological Survey, have shown particular interest in the results of this research program because of their integrated relationships and needs in identifying, utilizing, and regulating the use of our groundwater resources.

Groundwater Recharge Through Soil Fractures

Groundwater typically occurs within several hundred feet beneath land surface, making it particularly vulnerable to contamination that can move downward through pores, channels, and fracture in the earth matrix. A critical component of this research program is to determine the pathways by which agricultural chemicals are transported from land surface to shallow groundwater aquifers. The vulnerability of groundwater to contamination is increased where rapid infiltration of water occurs and a shallow water table exists. Classical agronomic and hydrologic research typically focuses on sites with coarser-grained soils and sediments. However, many of our productive agricultural areas occur in relatively fine-grained earth materials that have been assumed to have very low recharge capability. The EERC research was focused on understanding recharge at several field sites with glacially derived fine-grained soils and sediments. At one field site, several pesticides have been consistently detected in groundwater samples. Results also indicate that groundwater recharge is primarily depression-focused, with micro- and macrofractures providing the preferential rapid pathway for contaminant transport to the water table.

These results are significant because they show the relative ease with which shallow aquifers located below fine-grained sediments can be contaminated by the transport of agricultural chemicals along preferential flow pathways such as fractures. Because fractures are a common structure of glacial tills and glacial aquifers are a major source of drinking water in North Dakota, Minnesota, South Dakota, Nebraska, Iowa, Michigan, Wisconsin, Ohio, Pennsylvania, New York, Vermont, and Maine, it is important that we understand this transport mechanism. Where recharge is depression-focused, mapping of areas vulnerable to groundwater contamination may be possible, and management practices could be developed to minimize the potential for chemical contamination of groundwater.

COOPERATIVE PROGRAM SUPPORT

This research program has generated so much interest and demand for results that 24 presentations and/or publications have already been provided to various user groups, which reflects a widespread need for the products of this program. Farmers are supporting the program by providing private field sites at no cost. Irrigation groups, water-user boards, and agencies responsible for development and protection of water resources closely follow the research because it is important to them. The North Dakota State Water Commission has requested and received all data generated. Results from this research have been used to guide the ND Pesticide/Groundwater Technical Committee initiatives. The EERC has initiated an agricultural chemical groundwater investigation funded by the Devils Lake Sioux Tribe focused on agricultural chemicals in the tribal water supply, which is located in irrigated farmland. The EERC and AGVISE Laboratories, a private research group which conducts pesticide registration and chemical testing for several

chemical producers, are collaborating on an industry-sponsored initiative to understand ecosystem impacts of agricultural chemical usage. The program has resulted in a broad network of cooperating, supporting, and generally interested individuals and agencies including:

Dr. Maurice Horton, USDA, Washington
Margaret Townsend, Hydrogeologist, Kansas Geological Survey
Roy Spalding, Water Center, University of Nebraska-Lincoln
Dr. John Cherry, Hudrogeologist, University of Waterloo
Jerry Ayers, Research Hydrogeologist, University of Nebraska-Lincoln
Dr. David Gosselin, Research Hydrogeologist, Nebraska Geological Survey
Blyth Hoyle, Department of Civil Engineering, University of California-Davis
Dr. Edward Lloyd, AGVISE, Inc.
Russell Brown, AGSCO, Inc.
Devils Lake Sioux Tribe
Katherine Ellins, University of Florida
Nelson Shaffer, Research Geologist, Indiana Geological Survey
Dr. Robert Hordon, Water Resources, Rutgers University
Sarah Vogel, North Dakota Commissioner of Agriculture
Jon Patch, Hydrologist, ND State Water Commission
Dr. William Woessner, Hydrogeologist, University of Montana
William Schuh, Hydrologist/Soil Scientist, ND State Water Commission
Kenneth Junkert, Groundwater Program Director, ND Department of Agriculture
Herb Mittelstedt, ND Water Quality Coordinator, USDA SCS
John Gallagher, Grand Forks North Dakota Water Resource District
William Horak, District Chief, Water Resources Division, U.S. Geological Survey
Dr. Bruce Seelig, ND Extension Water Quality Specialist
Jeff Stoner, U.S. Geological Survey, St. Paul, MN
Wayne Burbank, Irrigation Advisor, Garrison Diversion Conservancy District
Dr. Carl Fanning, Extension Soil Specialist, ND
Ed Murphy, Environmental Geologist, ND Geological Survey

FUTURE RESEARCH PROGRAM DIRECTION

A long-term goal of this program is to expand the current broadly based and growing program through industry-sponsored cooperative projects. Nitrate and pesticide contamination of groundwater are growing issues that agriculture must understand and manage in a wide variety of settings including wetlands, a politically sensitive topic that desperately needs comprehensive hydrogeologic perspective. The EERC is committed to providing continued practical understanding of the occurrence, transport, and fate of agricultural chemicals in farm, ranch, and wetlands environments. The overall strength of the EERC research program lies in understanding climate-geology-water-chemical interactions and ultimately applying that understanding in the field.

UNIVERSITY OF UND NORTH DAKOTA

OFFICE OF THE PRESIDENT
BOX 8193, UNIVERSITY STATION
GRAND FORKS, NORTH DAKOTA 58202
(701) 777-2121

TESTIMONY SUBMITTED
BY
DR. KENDALL BAKER
PRESIDENT, UNIVERSITY OF NORTH DAKOTA

TO

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION AND RELATED AGENCIES
HOUSE APPROPRIATIONS COMMITTEE

The University of North Dakota (UND) is requesting $1.5 million in FY94 for the continuation and expansion of the North Dakota State Agricultural Weather Information System (NDSAWIS) and for the preliminary establishment of a National Agricultural Weather Information System. Since the establishment of the NDSAWIS in the summer of 1992, through funding from the U.S. Department of Agriculture, UND has taken the lead role in developing improved means by which to provide timely and pertinent weather information in a usable framework to agricultural producers across North Dakota and northwestern Minnesota. While the immediate benefit of the NDSAWIS program has to date been experienced in the Northern Great Plains, the work is intended to serve as a prototype for future State Agricultural Weather Information Centers as part of a National Agricultural Weather Information System. By drawing upon meteorological expertise within the University of North Dakota's Department of Atmospheric Sciences and the agricultural expertise of North Dakota's Land Grant Institution - North Dakota State University, a modern approach towards agricultural weather is being developed. This companionship between meteorological and agricultural disciplines must be established if state and national agricultural weather information systems are to succeed.

BACKGROUND

Present use of weather information by agricultural producers is generally limited to identifying how forecasts will affect farming operations. Unfortunately, because of the lack of guidance on the interpretation of these forecasts, producers rarely utilize weather information to its fullest potential. In addition, available weather information is often not appropriate to the producer's activities due to the lack of spatial and temporal resolution of the information. This lack of pertinent and applicable weather information is a source of particular exasperation due to dramatic variations in interannual weather conditions and an increasing need to protect the environment. These factors are creating a bigger demand upon producers to make critical choices on crop selection and pest and disease protection.

The 1990 Farm Bill to establish a National Agricultural Weather Information System (NAWIS), including a network of State Agricultural Weather Information Systems. However, funds have not yet been appropriated for the implementation of such a national program. A University of North Dakota proposal for a state system was funded with FY92 funds of $400,000 by the United States Department of Agriculture's Cooperative State Research Service. This funding was provided pursuant to section 1640 of the Food, Agriculture, Conservation, and Trade Act of 1990 (7 U.S.C.5854). This proposal initiated the development of the North Dakota State Agricultural Weather Information System in July, 1992, to begin to provide modern solutions to

agricultural weather problems. An additional $400,000 was also provided for and approved from FY93 funds for the continuation of the NDSAWIS.

The USDA/CSRS concluded that it was imperative that the North Dakota State Agricultural Weather Information System closely approximate what would be based on the same criteria as an approved State Agricultural Weather Information Center as outlined in section 1640 of the enabling legislation. Therefore, before approving the formation of a North Dakota State Agricultural Weather Information System, the UND proposal had to satisfy criteria commensurate with the intent of the formation of State Agricultural Weather Information Centers under the plan for a National Agricultural Weather Information System. These criteria were:

1. Develop a State plan for providing agricultural weather information
2. Establish link to the Regional High Plains Climate Center, Lincoln, Nebraska
3. Establish links to other universities in the region and in particular with the major agricultural institution in North Dakota, North Dakota State University
4. Develop fund sharing with other universities
5. Establish links and cooperation with private sector weather information production and delivery
6. Provide education to users regarding weather advisories and other information produced
7. Develop applications research including
 - Identification and prioritization of North Dakota weather information problems, and
 - Developing a strategy or plan for dealing with identified problems leading to improved agricultural weather advisory service
8. Evaluate service performed including
 - Assessment of economic benefits relative to costs, and
 - Identifying potential for enabling environmental quality maintenance leading to sustainability of production.

By satisfying these criteria the NDSAWIS became the equivalent to a State Agricultural Weather Information Center as authorized in the 1990 Farm Bill and as such becomes a prototype for future Centers.

A focal point of the NDSAWIS are the four primary objectives of the North Dakota State plan for an agricultural weather information. First, a system is being developed and made available to users of agricultural weather information that will transform timely weather data into useful management information. Second, weather observations important for agriculture are being increased by expanding an existing statewide agricultural weather observation network with remotely accessible automated surface weather stations and augmenting these observations with routine National Weather Service and Federal Aviation Administration weather observations. Third, informational and educational activities are being implemented to foster wider understanding of how weather information may be used to benefit agricultural production. And fourth, research into the use of real-time and historical weather information by agriculture is being fostered within universities in the Northern Great Plains.

THE NEED FOR STATE AGRICULTURAL WEATHER INFORMATION SYSTEMS

Many areas associated with agriculture can benefit from improved weather information. However, because the pace of modern synoptic and meso-synoptic meteorological technology has far outpaced its utilization by agriculture, it will take a number of years of continual adaptation, research, education, and funding before any State Agricultural Weather Information System can become fully established. The North Dakota State Agricultural Weather Information System was initiated with the intent of attending to both short and long-term agricultural weather problems. While immediate benefit can be seen from activities such as improved weather

observations, other problems such as applications research will require multiple years of effort and funding.

Many of the weather information related problems that exist with North Dakota exist in other agricultural production areas of the country. As such, work conducted in North Dakota on these problems further enhances the benefit to a National Agricultural Weather Information System.

Excessive Risk to Production Due to Weather. In North Dakota about 80 percent of damages to crop production are directly caused by the weather, i.e. drought, hail, wind. North Dakota is one of the country's major agricultural production areas and because crops in North Dakota are grown largely without the benefit of irrigation, the marginal rainfall received throughout the region makes crop production in North Dakota risky. The drought in North Dakota from 1988 to 1990 demonstrated how fragile crop production in the Northern Great Plains region can be. It also demonstrated the need for accurate and timely weather and climate information.

Since the 1988-1990 drought, irrigation has increased rapidly in North Dakota and will continue to increase in the future as a hedge against future drought conditions. While this provides tremendous potential benefit to production levels, use of a technology new to many of the state's farmers also has the potential to cause long-term damage to soils and ground water. Additionally, where surface water resources are not available, more use is being made of ground water supplies, which are depletable resources. The growth in irrigation development and possible over application of irrigation water may often lead to leaching of nutrients and chemicals from the soil to the ground water. Because timely weather is essential for optimal water use estimates and irrigation scheduling, steps must be taken to support the use of soil water models.

Production Risk Due to Weeds, Diseases, and Insects. From the moment seeds are planted, they are subject to attack by numerous disease organisms and insects. Weeds may grow faster than the seeds, thus crowding out the small plants and wasting valuable soil water. Producers spend a great deal of time and money attempting to minimize the impacts of pests by planting resistant varieties, rotating crops, and applying appropriate pesticides. However, some damage or yield reduction invariably occurs because the cost of pesticides is economically prohibitive or the timing is bad so they are ineffective. The weather during or immediately following application can destroy the effectiveness of the chemicals by washing it off the leaves, leaching it too deep in the soil, or inactivating it because of the dryness of the soil.

Weather determines the rate of plant, insect, and disease development throughout the growing season. Agricultural research has determined the role of weather in the development of many crops, weeds, disease, and pests. For some of these, weather data during the growth cycle have been successfully used in mathematical models to predict their future development. However, due to insufficient weather observations both spatially and temporally, many scientists have not invested time or money into incorporating current weather information into the development of important crop and pest development models. It is anticipated that the increased availability of current weather data will encourage further research into crop, insect, weed, and disease development models.

Inadequate Synthesis of Weather and Agricultural Information. Weather information will become useful to producers only when it is combined with a knowledge of the sensitivities of management practices, crop systems, and the insects and diseases attacking the crops. This requires new multi-disciplinary applications involving agronomists, soil scientists, horticulturists, entomologists, and plant pathologists working with synopticians, atmospheric dynamists, and climate modelers to define the sensitivities of the system to different weather features. Although some of this knowledge is already published in the scientific literature, it has

not been incorporated into a system that can keep track of the potential problems and management scenarios for a number of crops.

Inadequate Transfer of Weather Information to the User. All information, particularly weather information, is of low value unless the user receives the information quickly with adequate lead time to make and act on a decision. This requires that the information be presented in a usable and understandable format. Often this requires tailoring the output product and training the user. Presently weather information is provided in a similar manner as it has been for the past 30 years; i.e., presented in observation format without significant guidance towards user application. In addition, while sophisticated numerical analysis techniques have been developed within the operational synoptic weather analysis field to deal with weather observations in spatial and temporal domains, almost all agricultural weather information still depends upon single observation estimations for decision making.

Central to the development of the enhanced use of weather information is the establishment of a modern information dissemination network. In the case of the NDSAWIS this in being accomplished by developing an active interconnection with farmer-owned microcomputers through a statewide computer network. This is being fostered by the proliferation of higher performance, lower cost microcomputers which have provided many farmers with sufficient sophisticated resources to make distributed data processing a reality. With this computer capability, the producer ceases to be a viewer of information and becomes a manager of information. This not only includes the latest weather observations locally and regionally, but the latest information on how the weather will affect the daily operations and the planning and decision making process.

Lack of Research in the Applications of Agricultural Weather. The effects that changing weather and climate conditions may have on agriculture in the Northern Great Plains will require years of basic research to investigate. However, the need for early detection of these climate changes and early detection of drought are foremost in priority for insuring the sustainability of agricultural production for the region. Unfortunately, the amount of detailed climatological and agricultural weather data necessary to detect the atmospheric signatures of these phenomena and their effects does not exist in an information system capable of supporting holistic research.

Besides beginning the task of assembling the weather data required to evaluate climate change and providing them in an appropriate information system, basic research must continue to improve the use of short-term weather data in soil science, plant pathology, and entomology. Only through this effort will the effects of changing weather conditions on agriculture be resolved.

THE NEED FOR A NATIONAL AGRICULTURAL WEATHER INFORMATION SYSTEM

As multiple states establish agricultural weather information systems, a means of administering the individual state programs must be developed in order to foster the exchange of technology across state borders, coordinate research activities, and document the information being gathered and processed. This overall program coordination and administration by the USDA is the intent of the National Agricultural Weather Information System. The leadership role of a national coordinating office would be instrumental in assuring that State Agricultural Weather Information Centers are developed along the same criteria in which were used to establish the NDSAWIS. Because it would oversee all SAWIS activities, the NAWIS program office could streamline the cost of the overall agricultural weather program by insuring that duplication of effort in technology development is minimized between states.

OPPORTUNITIES FOR RURAL DEVELOPMENT AND GROWTH

Although work has been initiated in North Dakota on providing a State Agricultural Weather Information System, ongoing support must be provided in order to realize the full potential afforded the agricultural producer. With conservative estimates from the North Dakota State University Extension Service projecting the annual value of better agricultural weather information at over $20 million, the continuation of the NDSAWIS activity becomes an economic plus for rural North Dakota. Since the NDSAWIS technology can be transfered to other states developing agricultural weather information systems, this annual economic benefit can be even greater. Furthermore, since the technology developed as part of NDSAWIS need not be redeveloped elsewhere, additional fiscal savings and expediency in technology application can be realized.

While the number of issues that can and should be addressed by the North Dakota State Agricultural Weather Information System are many, resource limitations require that activities continue to be prioritized to maximize the benefit per dollar spent. The current target topics that we believe are of greatest priority are:

- Continued expansion of an agricultural weather observation network across North Dakota and northwestern Minnesota utilizing high performance, low-cost remote surface weather observation platforms,
- Continued enhancement of current NDSAWIS agricultural weather information software to include greater level of farm-field resource management capability,
- Development of improved methods of NDSAWIS weather information acquisition by establishing low-cost alternatives in user data acquisition,
- Continued NDSAWIS research into the use of operational mesoscale weather forecasting models as agricultural weather support systems, and
- Establishment of a national coordinating agricultural weather information office as part of the National Agricultural Weather Information System.

STATEMENT SUBMITTED

BY

DR. KENDALL BAKER
PRESIDENT, UNIVERSITY OF NORTH DAKOTA

TO

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
FOOD AND DRUG ADMINISTRATION AND RELATED AGENCIES
HOUSE APPROPRIATIONS COMMITTEE

INSTITUTE FOR HEALTH SCIENCES AND RURAL MEDICINE

SYNOPSIS:

The University of North Dakota is requesting $1.5 million in Fiscal Year 1994 to complete the federal share of funding for the establishment of the Institution for Agricultural Health Sciences and Rural Medicine. The Institute will consist of three interconnected buildings, a new Research Facility ($10.36 million), a new Bio-Information Learning Resources Facility ($4.41million), and the renovated Science North building ($8.42 million), for a total Institute cost of $23,190,000. Congress has appropriated through Fiscal Year 1993 $8.86 million to the USDA for the Research Facility. The other two buildings will be funded through private, non-Federal funds.

BACKGROUND:

The mission of the Institute is to address health prevention, research, human nutrition and safety issues of particular concern to farmers and rural residents. The initial funding request fell $1.5 million short due to unanticipated USDA administrative costs and the mechanical and electrical bids associated with the project. Funding for the three components of the Institute are interdependent; therefore, it is essential to receive the final $1.5 million from the Federal government to ensure the balance of funding from private and corporate funds.

Since the initial Fiscal Year 1991 funds were appropriated, officials of the University have worked with representatives of the Department of Agriculture toward the establishment of the Institute. A grant application was completed and returned to the agency on February 7, 1991, which was followed by a site visit by a Cooperative State Research

Service review team on April 22-24, 1991, culminating in the award of $2,805,240 as the initial federal share. Subsequent appropriations of $4,249,570 in Fiscal Year 1992 and $1,808,080 in Fiscal Year 1993 were approved by Congress.

In addition to the federal funds provided for this project, the Congress also recognized the need for this type of research when it included statutory language in the Food, Agriculture, Conservation Act of 1990 which authorizes the USDA to conduct research which will "enhance human health..by assisting farmers and other rural residents in the detection and prevention of health and safety concerns." (Public Law 101-624-, Section 1402(6)(2). In the same bill, Congress also established authorization for Rural Health and Education and Rural Health Infrastructure Improvement.

Establishment of the Institute will create a significant number of jobs. In the short term, some 160 new construction jobs will be created. Within several years, opportunity will be provided for some 12-14 Ph.D and some 6-8 M.D. research faculty to be employed, which will require some 20-25 B.S. and M.S. technical research support persons and 10-12 clerical positions. In addition, opportunity for the employment of some 30 additional mid-level support persons in fields of research, biomedical communications, computer assisted instruction, distance learning, rural health services and the library, will be created.

For Fiscal Year 1994

Name of Institution: University of North Dakota
Grand Forks, North Dakota

Project Director: William F. Sheridan, Professor

Title of Proposed Research Project: Support for the Maize Genetics Research Center

Desire Starting Date: 1 November 1993

Total Support Requested: $621,000

Synoptic Paragraph: Funds are requested to support basic research in maize genetics at the University of North Dakota. The research will analyze the genetic control of maize development under the especially favorable research environment at UND. This research relates intimately to agriculture and increased maize crop production because it will provide fundamental information regarding the growth and development of the maize kernel and plant. This information is valuable for maize breeders and future genetic engineering of maize. Funding of this request will increase the productivity of our ongoing maize research and will enable the recruitment of three senior researchers thereby enhancing our capacity to perform basic research in the developmental genetics of maize and to conduct graduate and postdoctoral training in this area.

Request: Funds are requested to support and enlarge the Maize Genetics Research Center and to support basic research in maize developmental genetics at the University of North Dakota.

We have a nationally recognized research program in maize genetics at the University of North Dakota. This program with Professor William F. Sheridan as Principal Investigator has been steadily funded for the last 17 years by the National Science Foundation, The USDA Competitive Grants Program, and the Rockefeller Foundation for a total of $1,162,000.

Unique Features of the Research Environment: Here at the University of North Dakota we enjoy certain unique features of the research environment that are especially favorable for analyzing the genetic mechanisms controlling maize kernel development and flowering. For many years we have studied the role of genes in kernel development by analyzing gene mutations affecting both endosperm and embryo development. In recent years we have analyzed several of these mutations and recently have identified a large collection of embryo specific mutations that comprise a very promising and unique opportunity to analyze the genetic control of embryogenesis.

A second unique feature here is our geographic location. We have extraordinarily long days in the summer of about 17 hours

duration with very short days of about 9 hours duration in the winter. It is well known that flowering in many varieties of maize are sensitive to day length. By growing corn plants here in the field in the summer and greenhouse in the winter, as well as in our experimental winter nursery on Molokai, Hawaii, we are in an especially favorable position to examine the genetic mechanisms controlling meristem determination and sex expression in flowering.

A third unique feature of our research environment is our experimental resources. We have over 80,000 ears of maize that includes many different mutations, and cytogenetic and genetic marker stocks. It is one of the largest collections of genetic stocks at any university of America and is probably the most extensive collection of experimental materials of any individual investigator in this country. In addition we have extensive laboratory and seed room space as well as a large experimental field of rich Red River Valley soil fully equipped with irrigation. We have one of the finest maize genetics research facilities in America.

The fourth unique feature of our research environment is the research expertise and excellence of our personnel and collaborators. Here at the University of North Dakota we have in addition to the principal investigator, two Ph.D. students, Mr. Don Auger and Mr. Guy Farish. In addition to these competent researchers we are especially fortunate to have three collaborative projects with outstanding researchers. The funds requested for this project will be used to vigorously pursue these three collaborations and will enable our collaborators to work with us and utilize our extraordinary resources.

We are presently collaborating here at UND with Dr. Janice K. Clark in the characterization of 51 embryo-specific (emb) mutations. These mutations identify genes that play essential roles in the morphogenesis of the maize embryo. We plan to complete the morphological and genetic characterization of these mutants and then to clone and molecularly characterize the most interesting of these genes.

A second collaboration is with Dr. Inna Golubovskaya, an internationally recognized Russian cytogeneticist (Vavilov Institute, St. Petersburg, Russia). Dr. Golubovskaya visited our laboratory at UND for four months in 1991 and five months in 1992 and together we identified seventeen new maize mutations affecting meiosis. We plan to search for additional meiotic (mei) mutations, to characterize the mutations cytologically and genetically, and to clone and molecularly characterize the most interesting genes. Dr. Golubovskaya's research expertise provides a unique opportunity for research collaboration.

The third collaboration is with Dr. Bing-Quan Huang a Ph.D. graduate of the University of Oklahoma who is presently performing research with us on the structural analysis of the

maize female gametophyte (embryo sac) and very young embryo. Dr. Huang is highly skilled in the microscopic techniques required for this important research. We are also searching for female gametophyte lethal (fgl) mutations with goal of cloning and molecularly characterizing genes that control embryo sac formation.

Relevance to Agriculture and Crop Production: Our current research and the future research of the Center relates intimately to agriculture and increased maize crop production because it will provide fundamental information regarding the growth and development of the maize kernel and plant. This information is valuable for the success of maize breeders seeking to improve this, the most valuable crop plant in America, and also provides the foundation for future efforts seeking the alteration of the maize genome by genetic manipulation through molecular techniques.

Benefits of Funding: Funding of this request will have two major benefits. It will enhance our capabilities to pursue our ongoing research on maize development including the kernel and flowering studies. Funding will enable us to expand our present collaborations so as to move forward on the isolation and characterization of the new emb, mei and fgl mutations. Because all of the new mutations are being isolated from active Robertson's Mutator stocks we anticipate that the new mutations will be molecularly tagged by the Mutator transposable element. Funding will enable us to initiate the cloning efforts.

The second major benefit of funding will be to stabilize the maize genetics research environment here at UND. It will enable Drs. Clark, Golubovskaya, and Huang to further develop their research interests in collaboration with the Center's Director. Here at the University of North we are geographically isolated and the maize genetics research program and the University will significantly benefit from the intellectual stimulation provided by the continued presence of these outstanding scientists on our campus. Funding of this request will enhance the international and multicultural strength of scientific scholarship here at UND. Funding will be especially beneficial inasmuch as it will enable us to bring together the exceptional scientific expertise of our collaborators with the uniquely favorable combination of experimental resources we have here at UND. Funding will enable our scientific collaborators to work together for an extended period here at the University while conducting field experiments in the summer and winter nurseries as well as performing laboratory research.

Funding of this request will also provide for securing needed field and laboratory equipment as well as supplies and travel required for conducting field experiments in the summer and winter nurseries as well as performing laboratory research. Funding will also enable the remodeling of space to provide laboratory and office space for the members of the Center. It is

anticipated that the University will provide additional matching funds from other sources to complete the remodeling of space.

Budget: Below is presented the budget for the requested funds. This is a realistic budget reflecting the real needs for establishing a supportive environment, and enabling the forward progress of the research efforts of the Center.

Budget

1.	Salary and Fringe Benefits:	
	a) Director	66,000
	b) Senior Level Researchers	180,000
	c) Technical Staff	45,000
	d) Graduate Student Stipends	30,000
2.	Field Equipment	60,000
3.	Laboratory Equipment	40,000
4.	Laboratory and Field Supplies	40,000
5.	Remodeling Space for Research	100,000
6.	Winter Experimental Nursery	30,000
7.	Research Related Travel	30,000
	Total	$621,000

TESTIMONY SUBMITTED
BY
DR. KENDALL BAKER
PRESIDENT, UNIVERSITY OF NORTH DAKOTA

TO

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
FOOD AND DRUG ADMINISTRATION AND RELATED AGENCIES
HOUSE APPROPRIATIONS COMMITTEE

NATIONAL ALTERNATIVE FUELS LABORATORY

PROJECT SYNOPSIS

The University of North Dakota (UND) requests $2.0 million in FY94 for the National Alternative Fuels Laboratory at the Energy and Environmental Research Center (EERC). Establishing the validity of the environmental benefits of alternative fuels is critical to their continued use and the future of the alternative fuels industry. Here the National Alternative Fuels Laboratory (NAFL) can make an important contribution. The NAFL program, begun in 1988 with the support of the U.S. Department of Agriculture, is part of the UND EERC in Grand Forks, North Dakota. In order for the EPA to develop effective environmental rulings, the necessary scientific data must be available. The mission of the NAFL builds on that of the existing Auto/Oil Air Quality Improvement Research Program providing the necessary, objective data needed by regulators. The NAFL has been asked to take on the role of an "underwriters' laboratory" for reformulated and biomass-derived fuels.

The National Alternative Fuels Laboratory (NAFL) program at the University of North Dakota's Energy and Environmental Research Center (EERC) in Grand Forks, North Dakota, was begun in 1988 with the support of the U.S. Department of Agriculture to generate scientific answers addressing concerns over domestic environmental and energy issues. As a result, the NAFL has since been asked to take on the role of an "underwriters' laboratory" for reformulated and biomass-derived fuels.

Some of the principal NAFL activities to date include:

- A national chemical survey of gasolines.
- A study of the effect of farm storage on ethanol and nonethanol fuels.
- Chemical studies of the effect of gasoline components on fuel volatility.

To achieve these results, we have developed new methods for fuels analysis and reduction of the related data and produced methods to allow interlaboratory comparative analyses of research results.

The ongoing debate over the Clean Air Act Amendments of 1990 makes it imperative that work be expanded to gather technical data on alternative fuels. The NAFL has been working with area agricultural groups such as the American Coalition for Ethanol (ACE) and the North Dakota Grain Growers Association to provide information on the many complex issues surrounding ethanol in gasoline. The Governors' Ethanol Coalition, New Uses Council, and the National Corn Growers Association are some of the organizations who have asked us to present our findings, and they continue to work with us, to keep the information flowing.

Closer to home, our state's Alternative Fuels Task Force has decided to focus initially on biodiesels, compressed natural gas, and ethanol. The NAFL is working with various agencies throughout this region to provide technical information and guidance as we embark on reducing our state's dependency on foreign energy imports. In this respect, concern over our reliance on foreign energy and the realization of the need to develop our domestic energy resources is not a local issue—this concern is shared by us all.

Recently, the NAFL was asked to submit a research proposal to the National Corn Growers Association (NCGA) to investigate the effect of ethanol denaturant on gasoline Reid vapor pressure (RVP), a widely used measure of fuel volatility. Astutely, the NCGA wanted the data to be acceptable to the Environmental Protection Agency (EPA). However, there were no established protocols to accomplish the work. Building on prior contacts with the EPA, we were able to rapidly develop a protocol that exceeded, as we were told, the level of prudence the EPA would itself exercise. The success of Dr. Gerald Groenewold, the EERC director, and his staff in accomplishing this goal is a prime example of the ability of a trusted, independent laboratory to join together principal interests in the important field of alternative fuels. Just last month, in February 1993, this research received a vote of confidence from the 19-member Governors' Ethanol Coalition.

Establishing the validity of the environmental benefits of alternative fuels is critical to their continued use and the future of the alternative fuels industry. Here, the NAFL can make an important contribution.

The NAFL continues to build, maintain, and expand the knowledge base on alternative fuels with detailed analyses of biomass-derived, renewable transportation fuels sold throughout the United States. In doing so, we wish not only to support domestic alternative fuel sources, such as ethanol, but also to improve the environment.

In fact, the mission of the NAFL builds on that of the existing Auto/Oil Air Quality Improvement Research Program. In order for the EPA to develop effective environmental rulings, the necessary scientific data must be available. To further facilitate this, the NAFL has initiated discussions with NREL, the National Renewable Energy Laboratory. We feel our program is highly complementary to the work being performed at NREL. We hope to develop soon a free and open exchange of laboratory data and other information between our organizations that will be available to all.

The Energy and Environmental Research Center at the University of North Dakota is in a unique position to contribute to the monitoring, evaluation, and development of biomass-derived fuels and domestic energy resources and to address associated

environmental concerns by building on our superb history of working with government regulators, industry, and state agencies.

Our current NAFL activities include:

- The continuation of an active fuel testing program.
- Studying the effects of ethanol denaturant on gasoline RVP.
- Strengthening our educational participation (e.g., Governors' Ethanol Coalition, North Dakota Alternative Fuels Task Force, ACE, and others) and our relations with regulatory agencies (e.g., EPA).
- Increasing the public awareness of developments in the area of alternative fuels through peer-review publication of technical activities.

These activities address, in part, the demand for scientific data that exists within the alternative fuels debate. With our current level of USDA support of $250,000 per year, we feel that the NAFL has provided unrivaled service in generating objective, scientific results. At the same time, it has rapidly become apparent that more work is needed. Expanding the NAFL to address the current and future questions surrounding the use of alternative fuels will require additional federal support.

Our future plans include:

- Investigations into climatic, geographic, and urban influences on gasoline RVP.
- Development of a regional, cold weather, full chassis dynamometry center at UND.
- The design of a "portable" test engine for cold-start emissions studies.
- Continued development of protocols for sampling of alternative fuels for testing.
- Investigations into optimizing the use of alternative fuels (e.g., ethanol blends >10%).
- Continuing as an advocate for a national science advisory panel on alternative fuels to respond to informational needs of the government, industry, and the private sector.

The expansion of the program to $2.0 million a year could accomplish these goals. This plan would include provisions for cost sharing and CRADAs (cooperative research and development agreements) to promote industry participation while being balanced to allow the smaller interests within the alternative fuels arena to advance their ideas.

The future for alternative fuels is bright. However, we still need to keep our eye on the main goal—a cleaner environment. What is the best way to reduce pollution? Our solutions must be effective, economical, efficient, and expedient. That is what our work at the NAFL is all about.

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Office of the General Manager

April 14, 1993

Honorable Richard J. Durbin
Chairman
Subcommittee on Rural Development, Agriculture
and Related Agencies
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515-6016

Dear Representative Durbin:

Fiscal Year 1994 Funding for the Department of Agriculture's Colorado River Salinity Control Program

I am writing to request your support for adequate federal funding for the Department of Agriculture's Colorado River Salinity Control Program (Program). The Program was authorized by Congress under the Colorado River Basin Salinity Control Act and the Clean Water Act. The Metropolitan Water District of Southern California is responsible for meeting the supplemental water requirements of nearly 16 million people and the economy which supports them. In 1992, Colorado River water was used to meet the majority of these supplemental needs.

Metropolitan is concerned with maintaining the quality of this vital source of water supply. The Colorado River Board of California and the Colorado River Basin Salinity Control Forum, the interstate organization responsible for coordinating the Basin states' salinity control efforts, have recommended a 1994 funding level of $18.4 million for the Department of Agriculture's on-farm management Program. This level of funding is necessary to meet the on-farm salinity control activities schedule in order to maintain the water quality standards adopted by the seven Colorado River Basin states and approved by the Environmental Protection Agency. The Colorado River Basin states and farmers in the Uinta Basin of Utah, the Big Sandy area of Wyoming, and the Grand Valley, McElmo Creek, and Lower Gunnison areas of Colorado stand ready to pay their combined 51 percent share of the construction costs of this Program. In addition, Program implementation in the Moapa Valley area

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of Nevada and investigation in the Price-San Rafael area of Utah depend upon the appropriation of adequate federal funding.

Metropolitan concurs with the recommended funding level of $18.4 million for the Department of Agriculture's activities. Your assistance and support in ensuring sufficient funding of the Colorado River Salinity Control Program for 1994 and beyond would be greatly appreciated by Metropolitan.

Very truly yours,

Richard W. Balcerzak
Acting General Manager

JPM:gn

cc: Mr. Gerald R. Zimmerman
Executive Director
Colorado River Board of California
770 Fairmont Avenue, Suite 100
Glendale, California 91203-1035

Office of the Dean
College of Agriculture and Home Economics
Washington State University
Pullman, WA 99164-6242

Office of the Dean
College of Forest Resources
University of Washington
Seattle, WA 98195

March 19, 1993

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APPNS.CMTE

The Honorable William H. Natcher
Chair, Appropriations Committee
U.S. House of Representatives
2333 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Natcher:

Attached herewith is a request under the Special Research Grants category for fiscal year 1994 from Washington State University and the University of Washington for the third year of funding for a three year project entitled "International Competitiveness - Agricultural and Forest Products." The work would be carried out by the International Program for Agricultural Commodities and Trade (IMPACT) Center at Washington State University and the Center for International Trade in Forest Products (CINTRAFOR) at the University of Washington.

As you know, these centers received $800,000 for this work in FY 1992 and FY 1993, 57.7% ($461,600) for the IMPACT Center and 42.3% ($338,400) for CINTRAFOR. We are requesting the same allocation in FY 1994.

These Centers have received strong support from both the State of Washington and the private sector in their efforts to improve international competitiveness. They have helped to generate substantial increases in exports of agricultural and forest products, which are among the few industries still contributing positively to the national balance of trade. Our studies also demonstrate that there are many new opportunities for increased agricultural and forest products trade. A continuing research and education effort is needed to capitalize on these opportunities.

Please feel free to contact either of us or the center directors regarding any questions you may have or if additional information on this proposal would be helpful.

Sincerely,

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STATE OF WASHINGTON

Special Research Grant

International Competitiveness-
Agricultural and Forest Products

Fiscal Year 1994

Amount Requested: $800,000

19 March 1993

Bruce R. Lippke, Director
CINTRAFOR
University of Washington
Seattle, WA 98195

A. Desmond O'Rourke,Director
IMPACT Center
Washington State University
Pullman, WA 99164-6214

SUMMARY

CINTRAFOR at the University of Washington and the IMPACT Center at Washington State University have developed complementary programs to improve the international competitiveness of U.S. agricultural and forest products. However, because the problems and constraints faced by each is different, the research plans for each program are discussed separately in this funding request.

The total amount requested for FY 1994 is $800,000, $461,600 (57.7%) for the IMPACT Center and $338,400 (42.3%) for CINTRAFOR. This request equals the appropriation received in FY 1993.

A major obstacle to improved competitiveness in both agricultural and forest products is lack of knowledge of the new technologies, policies and strategies needed to meet changing domestic and international conditions. Targeted research has been shown capable of generating that new knowledge. University education programs are effective in transferring that knowledge to industry decisionmakers and state and federal policymakers.

Among the critical areas needing research are:

- The impacts of recent and pending trade agreements.
- The pressure of new domestic and global environmental regulations.
- The need for job creation through value added products in depressed rural areas.
- The continuing increases in quality standards as world markets become more sophisticated.
- The problems of coping with the impact of technological changes in computing, electronics, telecommunications, transportation, automation, etc.
- The increasing challenges from well-financed (and often subsidized) competitors.

A Special Grant Program for
WASHINGTON STATE UNIVERSITY
Fiscal Year 1994 Amount Requested: $461,600

INTERNATIONAL COMPETITIVENESS - AGRICULTURAL PRODUCTS

Summary: This proposal requests funding of $461,600 in Fiscal Year 1994 for special grant research to address agricultural competitiveness issues that are critical to the future welfare of the state of Washington, the Pacific Northwest and the United States. The research will focus on the development of solutions to technical and economic barriers to competitiveness and the development of new agricultural products, new uses of existing products and new technologies to enhance competitiveness.

Statement of Problem: The future welfare of the agricultural industries and the surrounding rural economies is being threatened by changes in domestic and global markets. As nations become more affluent, they are becoming much more demanding in the quality, service and value they are seeking from their agricultural suppliers. At the same time, the intensity of competition in many products continues to increase both from traditional competitors such as Australia, Canada, Argentina and Western Europe, and from newer challengers such as Brazil, Chile, China and many others. The movement towards freer trade means that even the U.S. domestic market is increasingly vulnerable to competition.

The United States and the Pacific Northwest can no longer depend on the natural comparative advantages they derived from their rich soil, favorable climate, capable farmers and larger farms. They must now engineer new sources of competitive advantage through targeted research. This project would materially enhance agricultural competitiveness.

PROPOSED RESEARCH

The proposed research will focus on the development of solutions to the economic and technical barriers which are currently impeding agricultural competitiveness, and on the development of new sources of competitive advantage for Pacific Northwest agricultural products.

1. Response to changing trading rules: The U.S.- Canada Free Trade Agreement and the Caribbean Basin Initiative are a precursor of the dramatic changes in competitive situations that the agricultural industry will face if other proposed free trade initiatives such as the multilateral GATT negotiations, the Andean Initiative and the North American Free Trade Agreement come to pass. Research will focus on assisting Pacific Northwest producers in developing appropriate strategies to capitalize on these changes. For example, the U.S.- Canada Free Trade Agreement has dramatically opened cross-border trade in livestock and meats. The U.S.- Japan Beef Agreement has opened Japan to more American beef, but an economic slowdown in Japan is threatening hard-earned gains. We would examine the implications of these changes and alternative strategies to remain competitive for all major Pacific Northwest agricultural products.

2. Solving technical barriers that inhibit competitiveness: Specific impediments to product quality limit competitiveness of many of the Pacific Northwest's major commodities. These include the lack of protein separation standards for wheat, postharvest chemicals used in fruit, ergot in grass seed, TCK smut in wheat, brownleaf in hay, blackrot in cabbage seed, botrytis in berries and blackspot bruise in potatoes. Our scientists believe that with appropriate funding, they can overcome these technical barriers.

3. Research into new products: New crop and livestock products are absolutely critical in helping Pacific Northwest agriculture to tap new market opportunities, and to reduce production of products in oversupply. Our marketing research indicates that many profitable market niches are opening up. Specific targeted examples include edamame, azuki beans, wasabi radish, and Wagyu beef. Excellent progress has been made in discovering optimal growing, harvesting, processing and market conditions for these products. However, research is needed to bring these products to the point where they can be successfully taken over by the private sector.

4. New uses of existing products: Preliminary research has indicated numerous market opportunities for food and nonfood uses of existing products such as glutens and starches from wheat, dietary fiber from barley, specialized plastic film from legumes, and other value-added products from agricultural, forestry and seafood commodities. Major breakthroughs can be achieved in all these areas.

5. New technologies to enhance quality: The U.S. can rarely be the lowest cost producer because of its high land and labor costs and its distance from many markets. Thus, to enhance the competitiveness of Pacific Northwest agriculture, we propose research into selected new technologies that can either lower costs or ensure improved quality, such as the non-destructive testing devices for fruit firmness, and controlled atmosphere storage technology for consumer size packages.

TIME FRAME

It will require three years to complete the proposed research. We are requesting funding of $461,600 for FY 1994, and expect to request similar funding in FY 1995 and FY 1996. However, the flow of benefits to Pacific Northwest and U.S. agriculture has already begun and should continue in an increasing stream in the future.

A Special Grant Program for
THE UNIVERSITY OF WASHINGTON
Fiscal Year 1994 Amount Requested: $338,400

INTERNATIONAL COMPETITIVENESS OF US FOREST PRODUCTS

Summary: This proposal requests special grant funding of $338,400 in FY93 for research to address forest products competitiveness issues that are critical to the state of Washington, the Pacific Northwest, and the United States. The research will focus on opportunities for small and medium-sized companies who are economically and research-capability constrained in identifying and serving foreign markets. To enhance competitiveness, barriers to US construction methods and products must be reduced, value-added product opportunities identified, and new technologies commercialized. In addition, solutions to environmental issues with less negative economic impacts are crucial. Environmental impacts are directly linked to trade, requiring consideration of both environmental and economic impacts.

Statement of Problem: Previous progress made in increasing US forest products trade is being reversed by environmental constraints such as forest preservation plans for the northern spotted owl and forest practices changes to support other habitat. Markets lost to Canadian and other international suppliers cost thousands of US jobs. Research results show regional environmental constraints are counterproductive to the global environment as well. Research is needed to position surviving mills and their employee base to be more competitive in serving international markets with more value-added products while contributing to ecosystem sustainability. We can no longer depend upon our comparative advantage in growing wood alone; we must develop a competitive advantage in value-added products and more efficient processes supportive of the environment.

PROPOSED RESEARCH

The research will focus on technical, economic, environmental, and cultural barriers impeding US forest products competitiveness and on technologies, processes, and policies that will provide US products with competitive advantages. Technical problem-solving and research on customer end-use requirements and success factors will reduce the market penetration costs, thereby supporting increased exports and jobs for a declining timber base.

1. **Research on New Products and New Process Technologies:** Exports frequently can be traced to new products and technologies. Other countries have taken a substantial lead in several product areas, such as furniture and prefabricated home building, but are now experiencing problems with resource constraints, labor, or the cost of subsidies, providing opportunities to US processors especially in secondary wood manufacturing. Furniture, cabinet, and millwork, all dominated by small companies, are targets for increased exports. More custom metric cutting is essential to a US strategy of replacing foreign-processed wood with US-processed wood. Developing prefab component markets will also be required to maintain competitiveness over the longer term. Pulp fillers and secondary fiber utilization can increase the region's comparative advantage and increase output from the same fiber base.

Small companies lack the information required to be successful in international markets. Overseas markets differ from US wholesale distribution channels, requiring different approaches. Market research on specific products and usage requirements for specific countries will reduce these barriers and increase success in penetrating foreign markets.

2. **Research on Country Markets and Comparative Advantages and Disadvantages of Competitors:** Corporate strategies to penetrate foreign markets and support governmental promotion are largely predicated on research studies of country markets and competitors. Counterproductive policies and inferior competitive strategies can be avoided with adequate research on our competitors' strengths and weakness in resources, processes, product technology, skilled labor, and supporting governmental policies. The ability to understand how changes in country demand and supply will be sourced globally is vital to both corporate strategy and national trade policy.

3. **Research on Barriers Reducing US Competitiveness:** Distribution channel monopoly practices, processing standards, and product codes and specifications all have substantial impact on US products reaching foreign markets. New European codes are adding new barriers for US wood products. Asian barriers are declining one at a time as research information provides the knowledge for exporters to be aggressive in breaking down barriers and finding alternative distribution channels.

4. **Research on Environmental Policy Impacts:** Research is needed to characterize how forest management and product processing contributes to both biodiversity and economic sustainability. Proper use of renewable resources in environmentally-friendly applications is key to a better environment.

Both environmental constraints and the push to value-added processing, which tend to be focused closer on city markets, are eroding rural economic activity. A priority focus on forest management and secondary processing activities that are complementary to rural activities will receive special attention.

TIME FRAME

We request funding of $338,400 for FY94 (equal to the funding provided for FY93) as the third year in a five year program emphasis and expect to request continued funding to expand the product and country coverage over the next 3 years.

Illinois State University

INTENSIVE COMMERCIAL AQUACULTURE RESEARCH AND DEMONSTRATION PROJECT

SIGNIFICANCE

During the reauthorization process of the 1990 Farm Bill, Congress authorized the expenditure of additional funds for aquaculture programs throughout the United States. Some of these aquaculture initiatives involve the study of warm weather fish, such as catfish, grown in open pond environments like those conducted in Mississippi. These early initiatives have enabled farmers throughout the warm weather areas of the United States to expand their production alternatives to assist America's agriculture industries in meeting the growing food needs of our populations and for the expanding demand of more fish products in our commercial markets.

As a result of the 1990 Farm Bill, Illinois State University was authorized to receive funding for the further development and expansion of commercial testing of intensive aquaculture systems. In order to make the systems commercially viable and profitable for farmers in cold weather climates technology must be developed for allowing the efficient maintenance of water quality. Illinois State University is very appreciative of the interest and support of the U. S. Department of Agriculture in the initial phases of these intensive aquaculture programs.

The objectives of the Illinois State University project are to ascertain the cost of commercial finfish production in prototype intensive indoor aquaculture systems in the Midwest; develop, operate and evaluate prototype intensive aquaculture systems, system components and cultural practices that may lower production costs, improve product quality and/or reduce potential environmental impact of intensive fin fish production; and disseminate research findings and relevant information to the scientific community and appropriate public groups through reports, publications, demonstrations, and workshops. In addition, the project will examine the influence of species specific cultural practices; examine techniques for on-farm feed production utilizing corn, soybeans, and by-products; quantify the environmental impact of recirculating systems; and examine the potential for the development of commercially-viable ecosystems involving the integration of commercial chemical hydroponics and recirculating aquaculture systems. To date substantial exciting results have been realized. Projects have been initiated or are in partial stages of completion for all objectives listed.

In early February, 1993, the ISU Department of Agriculture broke ground for the construction of a 40' X 80' building at the ISU farm which will house a new state-of-the-art commercial aquaculture facility. This building was built with private sector funds leveraged from USDA appropriated funds. The building will be built as a model commercial aquaculture facility and will be operated as if it was a private for-profit fish farm. Records will be kept on all production inputs and sales so that profit potential can be accurately verified. This facility is unique - no other publicly-held, commercial-style facilities are available in the US at which the general public can gather production technology and have full access to all production cost data. The facility will contain 45,000 gallons of water and produce 50,000 pounds of live fish (tilapia) per year. This facility is scheduled for completion in mid-June, 1993. All research test procedures have been identified according

to industry and university standards. University personnel have been trained in specific testing techniques.

To assure the broadest benefit from this research program, formal cooperative arrangements have been developed with a variety of other research institutions such as the USDA National Center for Agricultural Utilization Research, Purdue University, Cornell University, University of Maryland at Beltsville, Louisiana State University, Iowa State University, University of Nebraska, Auburn University, and the University of Wisconsin. In addition, very strong linkages have been developed for the dissemination of research results to the private sector. During the initial phase of the work on this program, the investment of federal government funding resulted in several joint projects with private industry such as the Farm Bureau, Illinois Corn Growers Association, Archer Daniels Midland, the American Soy Bean Association and Energenetics, Inc.

Initial investigations into aquaculture indicate it may be sustainable and ecologically benign agricultural industry which employs under-utilized resources, generates alternate farm income, creates markets for midwestern grains, and results in a healthful, inexpensive and increasingly popular food product. Illinois State University appreciates the Committee's past support and is requesting the additional $200,000 in FY94 to continue the further development of the intensive aquaculture systems.

Illinois State University

INTENSIVE COMMERCIAL AQUACULTURE RESEARCH AND DEMONSTRATION PROJECT

TECHNOLOGY TRANSFER EFFORTS

Publications and Presentations

Kneller, P.B., W.N. Lockwood, Jr., P.D. O'Rourke and S.W. Waite. 1993. *"Aquaculture and Mobile Fish Processing"* Journal of Environmental Health (Volume 56, No. 1, July/August 1993)

Rosati, Ronald, P. D. O'Rourke, K. T. Tudor, and R.D. Henry. *"Performance of a Raceway and Vertical Screen Filter While Growing Tilapia nilotica Under Commercial Conditions"* "Aquacultural Engineering: An International Conference of Engineering Techniques for Modern Aquaculture" June 20-23, 1993, Spokane, Washington.

Rosati, Ronald, James Webb, David Hindrich and Patrick Foley. *"Characteristics of the effluent from a recirculating aquaculture system"*. 1993 annual meeting of the US Chapter of the World Aquaculture Society, January 29, 1993, Raleigh, S.C.

O'Rourke, P.D. 1992. *"Capital Budgeting and Practical Investment Analysis for Recirculating Aquaculture Systems"*. presented at AQUA '92: The Sixth Annual Minnesota Aquaculture conference and Trade Show. Duluth, MN.

O'Rourke, P.D. 1992. *"Data Limited on Recirculating Aquaculture Tanks"*. *FEEDSTUFFS,* June 29: pg.12.

Rosati, Ronald and Jeffrey Wood. 1992. *"Using Aquaculture to Teach Math and Science Concepts in Secondary School Agriculture Programs"*. proceedings of the Central States Regional Agricultural Education Conference. Austin, Minn., June, 1992.

Rosati, Ronald and Jeffrey Wood. 1992. *"Using Aquaculture to Teach Math and Science Concepts in Secondary School Agriculture Programs"*. proceedings of the 1992 National Refereed Poster Session for the American Association for Agricultural Education. St. Louis, MO., Dec. 5, 1992.

Rosati, Ronald and Jeffrey Wood. 1992. *"Competencies Required by Beginning Aquaculture Workers in Illinois"*. proceedings of the American Fisheries Society 122nd Annual Meeting. Rapid City, South Dakota, Sept. 1992.

O'Rourke, Patrick, Kerry Tudor and Ronald Rosati. 1992. *"Commercial Potential for a Mobile Fish Processing Plant"*. American Fisheries Society 122nd Annual Meet. Rapid City, South Dakota, Sept. 1992.

Rosati, Ronald and R.D. Henry. 1991. *"Aquaculture: a New Component of the Agriculture Curriculum"*. The Journal of The National Association of College Teachers of Agriculture. vol. XXXV, no. 4. Dec 1991.

Rosati, Ronald, Patrick O'Rourke, and R.D. Henry. 1990. "Preliminary Results of High Density Fish Culture in a Water Recirculating System". proceedings of the National Symposium on Freshwater Crayfish Aquaculture. Freemantle College of TAFE. Freemantle, West Australia.

Rosati, Ronald. 1990. "Water Re-Use Systems". Illinois Aquaculture Industry Association Annual Convention. Decatur, IL.

Rosati, Ronald.

Rosati, Ronald and R.D. Henry. 1989. "Developing an Aquacultural Education Program - A Case Study". National Agricultural Mechanics Professional Development Seminar Blue Ribbon Presentation. Kansas City, MO.

Rosati, Ronald, Patrick O'Rourke and R.D. Henry. 1989. "Tilapia Production in an Indoor Water Re-use System in Illinois". American Society of Agricultural Engineers Winter Meeting. New Orleans, LA.

Workshops

1. *Aquaculture Inservice: A workshop to provide aquacultural training to Illinois secondary-school agriculture teachers.* Illinois State University. January, 1993. (50 participants)

2. *Aquaculture: Regional Workshop for Beginning Farmers.* Illinois State University. November, 1992. (120 participants)

3. *Regional Workshop on Fish Culture Using Water Reuse Systems.* Illinois State University. November, 1991. (140 participants)

4. *Regional Workshop on Fish Culture Using Water Reuse Systems.* Illinois State University. November, 1990. (135 participants)

5. *Opportunities in Aquaculture.* Illinois State University. September, 1989. (45 participants)

Individual Contacts

1. Seven minute videotape segment of the national satellite teleconference *Investing in Freshwater Aquaculture.* April 10, 1993.

2. Project personnel have approximately 15 private-sector contacts per week to disseminate information on aquaculture technology on a one-to-one basis.

3. Approximately 400 people per month tour the aquaculture facility to gain additional information on production techniques.

4. Developed and disseminated the videotape *"Aquaculture in Illinois".* 1991.

Illinois State University

INTENSIVE COMMERCIAL AQUACULTURE RESEARCH AND DEMONSTRATION PROJECT

CURRENT AND PENDING SUPPORT[1]

	AMOUNT	
Tax Revenue Funding Source		
State of Illinois Dept of Commerce and Community Affairs	100,000	
ISU Technology Commercialization Center	40,000	
USDA 1992-96 appropriation	189,000	
USDA 1993-97 appropriation	186,000	
Illinois-Indiana Sea Grant Program	90,000[2]	
Illinois State University	222,800[2]	
NCRAC - USDA (effluent research)	18,900	
NCRAC - USDA (cost of production study - pending)	33,000	
subtotal		879,700
Private-Sector Funding Source		
Archer Daniels Midland	15,000	
Funk Foundation	8000	
Energenetics	12,000	
McLean County Farm Bureau	7500	
Illinois Power	17,000	
Growmark	50,000	
Spring Groves Fish Farm	1320	
Illinois Corn Marketing Board	15,000	
Red Ewald, Inc.	4000	
subtotal		129,720
TOTAL		1,009,420

[1] indicates funding and grants-in-kind which have been received on campus, and funding and grants-in-kind which have been awarded but not yet received from fiscal year 1988 through fiscal year 1993

[2] estimated

WRITTEN TESTIMONY OF
Dr. John Yopp
Associate Vice President for Academic Affairs and Research
Southern Illinois University at Carbondale
Representing the Illinois Groundwater Consortium

for the
House Appropriations Subcommittee on Rural Development
Agriculture, and Related Agencies
The Honorable Richard J. Durbin, Chairman

March 24, 1993

Mr. Chairman and Members of the Committee:

On behalf of Southern Illinois University at Carbondale, I am pleased to have this opportunity to discuss with you the proposed FY 1994 funding request of the Illinois Groundwater Consortium. The Consortium respectfully requests an FY 94 appropriation of $1 million through the U.S. Department of Agriculture to continue, for a fifth year, its critical study of the impact of agricultural chemicals on groundwater in Illinois.

The Illinois Groundwater Consortium grew out of an FY 1990 appropriation of $500,000 provided by this Subcommittee, to Southern Illinois University at Carbondale (SIUC) to focus on this important topic. As a result of this appropriation, SIUC joined forces with the Illinois State Geological Survey, Illinois State Water Survey, University of Illinois Cooperative Extension Service, and the University of Illinois Agricultural Experiment Station, to effectively work together toward providing a scientifically valid basis upon which meaningful agricultural chemical management and regulatory decisions can be based. Information on the occurrence, transport, and fate of agriculture chemicals in representative hydrogeological settings in Illinois will best be acquired through a joint effort of experts from the above nationally-regarded research entities in the State of Illinois.

The USDA-funded program is administered by SIUC. Today, in our fourth year of operation, we are involved in the acquisition of information gained from scientific investigations conducted by Consortium scientists. This information, supported by the initial appropriation of $500,000, the FY 1991 appropriation of $600,000, the FY 1992 appropriation of $750,000, and the FY 1993 appropriation of $750,000, is being disseminated to pertinent constituencies through incorporation into course materials, extension service activities, conferences, and publications. In addition, this information is available in published form to researchers, agency personnel, and the public in other states, to help them in addressing issues pertaining to agriculturally related impacts on groundwater quality.

Status of Current Program:

The Advisory Committee of the Illinois Groundwater Consortium, consisting of institutional representatives from each of the Consortium members and the Consortium Director (Dr. Victoria Molfese, SIUC) are overseeing the progress of 27 research projects currently receiving support from Consortium funds. In addition, the Advisory Committee is involved in the solicitation and review of proposals for new projects supported with FY 93 funds and with the Third Research Planning Conference.

(1) **Projects Funded in the Second Appropriation Year (Program Year Two).** Progress reports from six research projects which were approved for two year project periods were reviewed by the Advisory Committee. These projects include research on the historical use of chemicals and crop production on economically viable farms, contamination of wells, streams, and groundwater by specific agricultural chemicals, the transport of chemicals through different soil types, and public policy issues in water protection strategies. The Advisory Committee considered that the progress made in these projects to be appropriate, and a total of $214,690 of the FY92 funds was used to fund continuation projects.

(2) **Projects funded in the Third Appropriation Year (Program Year Three).** The major portion of FY 92 funds was used to support new projects. Eight of the 20 proposals receiving the highest peer reviewed evaluations were recommended for funding by the Illinois Groundwater Consortium Advisory Committee. These projects included research in identifying sources of nitrate in groundwater, contamination of wells by agricultural chemicals, the production of a public service publication on groundwater protection, transport of chemicals through different soil types and under differing soil conditions, effects of crops on chemical transport, public policy issues related to the Clean Water Act, and the effects of buffer strips on reduction of pollution. A total of $464,675 of the FY 92 funds was used to fund the eight new projects.

In addition, the Advisory Committee agreed to continue to exchange data samples between three laboratories (two at SIUC and one at Illinois State Geological Survey) to explore differences obtained in studies on the presence of atrazine in water or soil recommended to receive $5,000 each to continue the processing and analysis of the atrazine samples and comparisons of results. A total of $15,000 of the FY92 funds was used to fund the three atrazine projects.

(3) **Fourth Appropriation Year (Program Year Four).** The $750,000 in funds provided to the Illinois Groundwater Consortium in the fourth year will be used to support new projects. Proposals have been solicited through a request for proposals sent to consortium institutions. Proposals are peer-reviewed by experts in the field, representing a variety of institutions, including the University of Illinois, University of Arkansas, Purdue University, Illinois Natural History Survey, and the Illinois Soil Conservation Service. The highest evaluated proposals are then reviewed by the Illinois Groundwater Consortium Advisory Committee, which subsequently selects the projects recommended for funding to the

USDA. By July, the fourth year program should be funded and in operation.

(4) Research Planning Conference.
The Illinois Groundwater Consortium remains committed to a continuation of this annual meeting to help fulfill the technology transfer function of the program. The second Research Planning Conference was held in Springfield, Illinois, on April 26 and 27, 1992. Presentations were made by all the principal investigators of all projects supported by Consortium funds at that time. The proceedings of the conference have now been published and distributed. The third Research Planning Conference is planned for March 31 to April 1, 1993. A total of $12,500 of the FY92 funds will be used to fund the research planning conference and for publishing the proceedings after the conference.

FY1994 Request:

The Consortium is requesting a FY1994 funding level of $1 million (Program Year five). Each year over twice as many projects are submitted as proposals than are funded as grants because of limited funding. The Consortium is hopeful that a broad based research program can continue to be developed. Additional funds will enable the Consortium to more adequately focus on issues of current and historical importance to groundwater quality in Illinois. The funding will be channeled to projects falling under the following priority areas:

(1) Assessment of agricultural practice effects on fate and transport of chemicals;
(2) Assessment of existing groundwater quality;
(3) Evaluation of agricultural practices contributing to groundwater contamination;
(4) Studies of existing and past agricultural and agrichemical practices;
(5) Regulatory and incentive effects;
(6) Groundwater protection strategies;
(7) Education and extension service activities;

Ninety-five percent of the funds provided to the Consortium will continue to be used for project activities and the Research Planning Conference. Only five percent of the funds are used for administration and clerical support. The universities and scientific surveys involved in the Consortium are waiving their usual indirect cost rates on these awards in order to provide maximum support of these funds to this essential research. Prioritization of funding objects will be accomplished through recommendations by the external reviewers, discussions at the Research Planning Conferences, and decisions of the Advisory Committee. The highest research priorities will include research in areas of great need, but for which there is currently little or no state/federal funding because of budgetary constraints.

Preliminary Budget:

Continuation Projects	$495,286
New Projects (11)	367,214
Special Projects	62,500
Administrative Support (5%)	62,500
Research Planning Conference	12,500
TOTAL	**$1,000,000**

On behalf of Southern Illinois University at Carbondale and the Illinois Groundwater Consortium, I wish to thank the Subcommittee for the opportunity to submit this testimony to you. The efforts of Chairman Durbin and the Subcommittee have been responsible for what may be the finest consortial research effort on groundwater in the country. We hope you will be able to allow us to continue our work during the fourth year of funding.

Statement of
Dr. Jerry R. Gillespie
Professor and Head Department of Clinical Sciences,
Kansas State University, and Principal Investigator
representing the
Food Animal Production Medicine Consortium (FAPMC)[1]

Submitted to
Subcommittee on Appropriations on Agriculture, Rural Development, Food & Drug Administration & Related Agencies
U.S. House of Representatives

Thursday, April 10, 1993

SUBJECT: Pre-Harvest Food Safety; a practical and efficient approach to limiting or eliminating biological and chemical contamination of food

Mr. Chairman and members of the Subcommittee, I am pleased to have this opportunity to present a written statement on behalf of the FAPMC. We acknowledge and appreciate the Committee Members' interest in improving human health, sustaining agricultural resources, and improving agricultural's long-term competitiveness and profitability by exploring new ways to improve our current food inspection programs.

The Food Animal Production Medicine Consortium (FAPMC) represents faculty and staff from six Land-Grant Universities[1] who joined together in 1988 to improve the quality and efficiency with which we address our universities' missions: 1) veterinary education in the area of food animal medicine, food safety and public health, 2) on-farm food safety research, 3) animal health and natural resource management research, and 4) clinical service to animal agriculture. These missions are interdependent, and our overall task is to improve food safety, reduce the incidence and cost of animal diseases, preserve natural resources and help build a sound economic base for animal agriculture. The FAPMC's teaching programs and joint research programs have been extraordinarily successful because of the diverse animal agriculture served by these universities and the combined strength of their faculties.

[1]THE FOOD ANIMAL PRODUCTION MEDICINE CONSORTIUM (FAPMC)
University of California-Davis, University of Florida, University of Illinois-Urbana-Champagne, Kansas State University, Michigan State University, and University of Nebraska-Lincoln.

I wish to say at the onset that the proposals for research, education and implementation of improved on-farm practices encompassed in the pre-harvest food safety principles are consistent with Track II proposed by FSIS.

Members of FAPMC have been developing the concept of pre-harvest food safety since 1985.

Recognizing that most contamination of food animals by potentially harmful chemicals or microbiological agents originates on farms, we have designed model management programs to limit contamination of animals or food products prior to their leaving the farm gate of privately owned "core farms" in each of the 6 states. Working with practicing veterinarians and producers, specialists from our faculties use computer-based, comprehensive management programs that systematically examine control strategies for contaminants at Critical Control Points (CCP) on the farm and during transport of food-products to processing plants. Our initial on-farm tests include beef, veal, pork, dairy, sheep and poultry production units in the 6 states, and each has achieved improvement in production practices leading to better quality assurance for products leaving these core test farms and at substantial savings and greater profits for producers.

We are convinced that vast improvements can be made very soon in food safety by implementing our current analysis and management programs. To expand the use of this new management technology will require a substantial effort to educate veterinary specialists at other institutions, practicing veterinarians, producers and others involved in food production during the pre-harvest phase. While our innovations have focused on food animal production units, we believe similar strategies can also be used for vegetable and food-grain production units.

There is a need for much more pre-harvest food safety research, education and technical transfer. This is an area that has not been adequately funded considering its potential payoff for the food industry and the consumer. I will mention only a few examples of projects that in our view should have high priority for funding:

1. **Ecology of human pathogens on food-producing farms:** A comprehensive study of the ecology and control of Escherichia coli 0157:7H in food animals on the farms. This study of E. coli should serve as a template for control of other human pathogens such as Salmonella, Campylobacter, Listeria monocytogenes, or Cryptosporidium sp, to name a few. Well designed epidemiological studies which have the capacity to simultaneously evaluate impact of multiple variables will be required to fully understand the ecology of these organisms on farms.

2. **Rapid On-Farm Detection Technologies:** Investigation of rapid testing techniques for on-farm detection of E. coli 0157:H7 and other organisms. For example, there are DNA-probes that will detect specific strains of E. coli, and probes exist for other pathogenic microorganisms which may be of use to screen for these organisms in the proposed on-farm epidemiology studies.

3. **Hazard Analysis Critical Control Points on Farms:** A study to identify those environmental and/or the management factors that favor or lead to the occurrence and persistence of E. coli 0157:H7 (or other pathogenic organisms) in food animals. These studies could use the Hazard Analysis Critical Control Point (HACCP) approach on the test farms. We envision this study will involve the professional staff of several agencies within USDA (FSIS, APHIS [NAHMS], CES, and ARS), EPA and FDA, and representatives from the private sectors of agriculture.

4. **Nation-wide Shared Data:** The development of a nation-wide shared computer-based, data-management system for collection and analysis of on-farm information that impacts on food safety and environmental practices. This data-base will provide investigators and others access to advance technology and information more rapidly, and reduce unneeded redundancy in pre-harvest food safety investigations.

5. **Outcome Assessment:** We believe these studies (and others) should include evaluation of their impact on improving food safety, sustaining agricultural resources, improving consumer safety and satisfaction, and improving long-term profitability in the agricultural sector.

These research efforts should be coordinated with efforts to introduce and implement on-farm, management practices that will reduce or eliminate E. coli 0157:H7 and other pathogenic organisms from food animals prior to leaving the farm gate. This can be done with a coordinated program operated by Land-Grant Universities in cooperation with USDA Agencies, producers, commodity groups, veterinary college faculties, practicing veterinarians, Cooperative Extension Service and others. The goal should be to form an information network to provide new information on food safety issues which will lead to improved practices of producers, public health officers, consumers and others involved in the production and processing (preparing) of food. We envision the use of core-farms as demonstration units for this eduction and implementation effort.

Mr. Chairman, the National Research Council (1985) concluded "that the most effective way to prevent or minimize hazards presented by certain infectious agents and chemical residues in meat and poultry is to control these agents at their point of entry into the food chain, i.e., during the production phase on the farm and in feedlots."

Historically, public health officers have repeatedly demonstrated that preventative medicine is the most effective and economical approach to managing or eliminating diseases. We believe these principles apply to addressing the problem of food-borne illnesses. We urge there be $4 million appropriated in the FY-94 budget to address the research and education initiatives in the area of pre-harvest food safety. This approach will provide benefits for the producer, processor and consumer, and potentially reduce the high cost of food-safety monitoring at the post-harvest (processing) steps in the food chain.

Thank you, Mr. Chairman

TESTIMONY SUBMITTED TO
THE U. S. HOUSE OF REPRESENTATIVES
APPROPRIATIONS SUBCOMMITTEE ON
AGRICULTURE, RURAL DEVELOPMENT, FDA, AND RELATED AGENCIES

The Honorable Richard J. Durbin, Chairman

Washington, D.C.

March 30, 1993

by

THE UNIVERSITY OF ILLINOIS
COLLEGE OF AGRICULTURE

David L. Chicoine, Head
Department of Agricultural Economics

THE UNIVERSITY OF ARKANSAS AT FAYETTEVILLE
COLLEGE OF AGRICULTURE

J. Charles Headley, Head
Department of Agricultural Economics and Rural Sociology

MR. CHAIRMAN AND DISTINGUISHED MEMBERS OF THE AGRICULTURE, RURAL DEVELOPMENT, FDA, AND RELATED AGENCIES SUBCOMMITTEE:

We are pleased to offer this testimony on behalf of the *Center for Farm and Rural Business Finance*. Formalized late in 1991, the Center is a federally assisted initiative undertaken jointly by the Department of Agricultural Economics at the University of Illinois and the Department of Agricultural Economics and Rural Sociology at the University of Arkansas. Again, we want to thank you, Chairman Durbin, and the Committee for appropriating $125,000 for FY 1992 and again for FY 1993 to aid in initiating the work of this Center.

In addition to federal funding for FY 1993, the Center is supported through the following funds:

- $240,500 in faculty-researcher salaries through the Illinois and Arkansas Agricultural Experiment Stations;
- $45,000 from the State of Illinois; and
- $86,000 from private and finance industry sources.

To fully establish and institutionalize the Center, an additional $650,000 in federal funding is requested.

Background and Need. The Center is a continuing response to the major upheaval and change among the providers of financial capital for U.S. farm and rural businesses through the mid-1980s and continuing into the '90s. During this period, producers and capital providers have retrenched; new players have entered the field; laws affecting the industry have been altered at state and federal levels; a patchwork of state-sponsored programs have emerged; structural changes in the banking and Farm Credit systems have prompted new strength but also uncertainty.

During the 1990s, the financial industry is being internationalized; vertical coordination is restructuring farm and rural businesses with strong financial implications for producers and integrators and their capital providers as well.

Now, the immediate efforts to reduce the federal deficit include reductions in farm program payments and government direct credit programs with apparent significant cost increases to farm and rural businesses through new energy taxes and increased user fees. Despite the long-term benefits of deficit reduction, the farm and rural economies are experiencing greatly increased uncertainties while their capital providers are reevaluating their commitments to rural capital uses.

On top of the inherent risks associated with the provision of capital to farm and rural sectors, there is a higher-than-ever premium on information and understanding of credit relationships among the changing providers and users of essential capital in rural America. In response, the Center provides an ongoing and objective research and information base for decision-making by farm and rural businesses, their lenders, investors and policy makers.

Long-Term Focus. The ongoing work of the Center is targeted at three levels of inquiry:

1. financial management and performance of farm and rural businesses;

2. financial markets and credit institutions serving rural America; and

3. farm and rural business financial and credit policies and programs of state and federal government.

Accomplishments. A major effort of the Center has been to organize, establish working relationships, make the Center known, and initiate the work of the Center. During its first full year of existence, the Center has pursued three principal areas of activity: 1) *Credit Relationships in Agricultural/rural finance*; 2) *Vertical Coordination and Financing in Agriculture*; 3) outreach to a rapidly changing industry through the *National Symposium for Agricultural Finance Executives*.

We are pleased to provide the attached Annual Report -- 1993 of the Center as a Technical Appendix to this statement. Among the noted accomplishments in these three areas of activity are the following.

Credit Relationships in Agricultural/Rural Finance. In the area of Credit Relationships the Center has:

- Published *A Farmers Guide to Agricultural Credit* that helps farmers better understand new developments in credit by outlining a practical approach to evaluating loans.

- Published *Financial Characteristics of Illinois Farms*, an annual publication that provides benchmark financial ratios and financial statement data for farms classified by size, type, tenure, leverage, and age of operator.

- *Surveyed midwestern agricultural banks to identify their credit evaluation and risk assessment procedures, and consistency of credit scoring models.*

- *Built a credit scoring model* for lenders to use in reviewing the quality of their agricultural loan portfolios using recommendations of the Farm Financial Standards Task Force, along with a team of agricultural loan personnel.

- *Documented the feasibility of using a combination of actual and simulated farm-level financial data to formulate credit scoring models* with classification accuracy similar to models estimated using traditional statistical procedures.

- *Studied, through a second midwestern survey, the characteristics of banks using risk-adjusted interest rates* and whether this loan pricing practice significantly affects the banks collateral requirements, loan documentation, and other methods of managing the credit risks of agricultural borrowers.

- *Measured the extent of and reasons for differences in farm loan interest rates* among geographic regions using banks' balance sheet and income data.

- *Surveyed Chapter 12 filings in Arkansas and Illinois* with analysis underway to identify characteristics leading to completion, withdrawal or dismissal of the plans.

- *Surveyed Western Arkansas commercial banks to appraise attitudes about Chapter 12 and lender liability litigation*, particularly with respect to the propensity to lend to marginal agricultural borrowers.

Vertical Coordination and Financing in Agriculture. Vertical coordination is expanding rapidly in agriculture due to changes in consumer demand, new technologies in production and handling, and innovations in information management and financing. These developments pose significant managerial and structural implications for producers, agribusiness firms and their capital providers. The Center is, therefore, dedicating a major share of its resources to understanding these contractual arrangements and the resulting information problems and incentives for the parties. In this area, the Center has:

- Developed and implemented a unique *focus on the relationships between vertical coordination and financial structure.*

- *Identified important concerns for financing assets used in vertically coordinated production.* This work is part of a number of projects that address the financial implications of the increasingly common vertical contracts in agricultural production.

- *Developed case studies to highlight the problems and benefits associated with contract production and other forms of vertical coordination.*

- *Implemented a project to explore how key characteristics of production arrangements, asset holdings, and contracting terms influence the emerging governance structures utilized to accomplish vertical coordination.*

The National Symposium for Agricultural Finance Executives. Responding to the changing and increasingly diverse and non-traditional channels through which capital is being provided to farm and rural businesses, the Center hosted the first annual National Symposium for Agricultural Finance Executives in April of 1992. This major initiative of the Center provides an annual and unique forum for major decision-makers involved with the financing of farm and rural businesses -- providers, users, scholars, and policy makers -- to consider and interact on strategic issues of common concern.

Work in Progress. Continuing to pursue these three principal areas of activity, among major projects pending during 1993 will be to:

- Identify and quantify *small farm growth potential* and the resulting potential contributions of those farms to financial activity in rural areas.

- Evaluate the *costs and benefits of state and federally sponsored young farmer loan guarantee programs* and to assess their impacts on farm and rural communities.

- Construct and implement a computer model of representative farms to *evaluate the farm-level effects of FmHA young farmer lending programs and the potential for borrowers to graduate* from those programs to commercial sources of credit.

- Develop a *model for valuation of loan guarantees* that will be useful in setting guarantee fees and other terms and in *gauging the aggregate liability of a loan guaranty program* based upon a pool of participants.

- Identify and compare against alternative programs, the *costs and benefits of U.S. export loan guarantee programs.*

- Evaluate the changing *role and structure of the farm credit banks* through agency cost analysis.

- Document and evaluate the *impact of Chapter 12 bankruptcy* on a sample of Chapter 12 filers and their lenders.

- Survey and document *the cost-structure of nontraditional lenders* to agriculture.

- Assess the *implications for financing under vertically coordinated agricultural production.*

- Evaluate the *economic efficiencies of commercial banks lending to agriculture* and the effects of differing empirical methodologies upon the resulting empirical performance data.

- Evaluate the role of *reverse mortgages as financial management tools* in farm retirement/transition planning.

- Examine the *performance of farmland markets* in terms of turnover and transfer mechanisms.

- Conceptualize and measure the effects of *agency cost controls in credit relationships on efficiency and capitalization of agricultural productions units.*

- Develop a computerized model to quickly and accurately determine the *merits of a proposed farm loan refinancing.*

- Determine the accuracy of popular econometric techniques in identifying the *most efficient banking firms in a sample of such firms.*

Again, as a major program of the Center, the Center will host the second annual *National Symposium for Agricultural Finance Executives* in April of 1993.

Resources. The Center draws primarily from the combined resources of the Universities of Illinois and Arkansas, each with a record of consistent leadership in agricultural and rural finance and in agricultural law.[1] The work of the Center is carried out by a team of thirty-two faculty, academic professionals and graduate students at these two institutions. Ensuring a multi-regional approach to the issues involved, however, the Center draws upon the resources of other institutions as well.

Endorsement. The Center continues to enjoy a broad base of support with special assistance and active involvement of the Illinois and Arkansas Farm Bureau, AgriBank, FCB, St. Paul, MN and the Farm Credit Associations of Illinois and Arkansas. We are pleased to note the attached list of groups and institutions that have given their endorsement to the Center.

Summary. The Center for Farm and Rural Business Finance is a program of ongoing research and education targeted at the financing of farm and rural businesses. It is a response to the information needs of these businesses, their credit providers and policy makers following the economic upheaval of the 1980s and the now increased uncertainties for the farm and rural sectors through the balance of the 1990s. With state and private funding and with appropriations of $125,000 for FY 1992 and FY 1993 the work of the Center is underway. An appropriation of $650,000 is needed to complete the requisite $900,000 in federal start-up assistance to establish the Center and its program of essential farm and rural business research and financial information.

[1] According to a recent survey of "ag school deans" reported in the mid-March 1993 issue of Farm Futures magazine and referring to the Center, the University of Illinois "*. . . is considered the best place to study ag finance.*"

Support and Endorsements for the Center for Farm and Rural Business Finance

Formalized in 1991, the Center has enjoyed the endorsement of these organizations:

American Bankers Association
The Farm Credit Council
National Rural Electric Cooperative Assn.
CoBank (National Bank for Cooperatives)
National Corn Growers Association
AgriBank, FCB
Illinois Farm Development Authority
Illinois Bankers Association
Community Bankers Association of Illinois
Arkansas Farm Bureau
Illinois Farm Bureau
Illinois Farmers Union
Riceland Foods, Stuttgart, AR
SF Services, Little Rock, AR
Illinois Corn Growers Association
Illinois Soybean Association
Arkansas Rural Electric Cooperatives
Soyland Power Cooperative, Inc.
Farm Credit Services of Southeastern Illinois
Farm Credit Services of Northern Illinois
Farm Credit Services of Central Illinois
Farm Credit Services of West Central Illinois
Farm Credit Services of Eastern Arkansas
Farm Credit Services of Central Arkansas
Farm Credit Services of Western Arkansas
Arkansas Soc. of Prof'l Farm Managers and Rural Appraisers
Illinois Soc. of Prof'l Farm Managers and Rural Appraisers

TESTIMONY, SUBMITTED TO
FY 94 AGRICULTURAL APPROPRIATIONS
SUB COMMITTEE

BY THE EXOTIC FRUIT FLY
COALITION PARTNERS
15 APRIL, 1993

Submitted by Dean Buchinger
Coalition Coordinator,
PO Box 4537, Blue Jay Ca, 92317
(phone (909) 337-6862, fax 336-6922)

The Exotic Fruit Fly Coalition Partners are a broad based group of organizations and farming companies dealing with the threat of exotic fruit fly infestation. The increasing danger of this threat and the decreasing amount of protection on the part of APHIS PPQ and IS in warding off this threat has prompted this organizations founding. There are 5 states involved including CALIFORNIA, FLORIDA, TEXAS, ARIZONA, AND HAWAII. This testimony is being submitted in conjunction to a Coalition letter of deep concern recently sent to Secretary of Agriculture, Mr Mike Espy. In detail, the Coalition concerns are that the following program improvements need to be implimented:

1. It is essential that exclusion efforts across the U.S. be given adequate funding to implement the recommendations of the July, 1992 APHIS risk assessment regarding protection from Medfly invasions. This will insure protection against invasion from a number of exotic fruit fly pests as well as other unwanted plant and animal material.

2. It is essential to support fully, the program of establishing a PEST FREE ZONE along the U.S./ MEXICO border against the Mexican Fruit Fly as has been emphasized by the California Department of Food and Agriculture in testimony at this hearing.

3. It is essential to continue research efforts to find better and more acceptable detection, eradication and exclusion efforts to keep destructive fruit fly populations out of the UNITED STATES.

4. It is essential to establish preclearance programs in HIGH RISK areas of the world such as Guatemala. Also, full coverage inspection of HIGH RISK 1st class mail and all international mail from HIGH RISK areas is necessary, and a cost effective way to greatly reduce pest risk.

The Exotic Fruit Fly Coalition Partners believe that it is essential to invest the funds needed to accomplish the above goals. This would greatly lower the potential of the continued spending of additional MILLIONS OF DOLLARS in emergency eradication programs such as is presently being done in California.

The Exotic Fruit Fly Coalition Partners believe also, that much of the funds needed are being generated by USER FEES that are presently directed to the GENERAL FUND. All user fees generated for AQI inspection should be kept within the system, and the present level of FINES should be increased to reflect the serious nature of the crime. Additional funds needed should be generated by increasing the federal user fee program now in place.

In conclusion, the Coalition Partners believe that modification to present personnel programs in APHIS so that an environment of greater flexibility at the regional level can be achieved. This flexability can be achieved through appropriate use of contract labor, reevaluation of overtime policy and a greater degree of decision making at the regional level. These things, coupled with the retention of user fees and increased fines would greatly improve the current program.

Please accept, as part of this testimony the Coalition letter sent to Secretary Espy dated 12 March, 1993 which is included with this package.

FIVE STATE
EXOTIC FRUIT FLY COALITION
LETTER TO THE
SECRETARY OF AGRICULTURE

12 March, 1993

Office of the Secretary,
United States Department of Agriculture
Room 200 A, Administration Building
14th and Independence
Washington, D. C. 20250

Dear Secretary Espy,
On December 1st and 2nd, 1992 a fruit fly stakeholders meeting was held by USDA/APHIS and IS. This meeting was attended by agricultural organizations from around the country. Several issues were raised regarding your agencies ability to continue it's resolve of "PROTECTING AMERICAN AGRICULTURE" from the many exotic fruit flies attacking commodities in our vulnerable States.

Over the past several years a dramatic increase in fruit fly infestations have been detected several states. In most cases these detections have resulted in succesful eradication programs. In some however, the result has been establishment of endemic populations.

These incidents are caused by a dramatic increase in casual tourist traffic, commercial shipment of vulnerable products and 1st class mail violations. The science and technology of fruit fly detection and eradication has grown and matured during this time, unfortunately, so has the cost of conducting such programs.

As a result of industry concerns regarding this issue, a 5 state coalition has been formed, and a set of priorities regarding fruit fly programs has been established. These states include California, Florida, Texas, Arizona and Hawaii. Although 8 specific priority objectives have been identified the most pressing issues needing immediate attention are:

1. STRENGTHENING EXCLUSION PROGRAMS

2. KEEPING THE RESOLVE OF CONGRESS FOR SUPPORT OF ERADICATION PROGRAMS

3. CREATION OF LEGISLATION ALLOWING PPQ TO KEEP FUNDS GENERATED FROM AQI INSPECTION FINES

4. ESTABLISHING A PEST FREE ZONE ALONG THE ENTIRE US MEXICO BORDER

In addition, all participants recognized the importance of continued research and development of new and better detection and control mechanisms for fruit flies, including lures and baits.

If left unchecked, fruit fly populations will deliver a devastating blow to many vulnerable agricultural crops in the sunbelt state area. Our ability to move fresh product in the domestic and export markets will be seriously compromised, and the use of pesticides would be greatly increased. In addition, consumer prices will rise as a result of these added costs.

We request therefore, that you convene a special meeting as soon as possible to explore ways of solving the problems facing our industry, and the consumer. We look forward to charting a course resulting in permanent protection of our vulnerable agricultural products.

We look forward to an early response to our request. Attached to this letter are signature pages of some of the many organizations supporting this effort. Please direct your response to Mr Dean Buchinger, P O Box 4537, Blue Jay, Ca
Phone: (909) 337-6862, Fax: (909) 336 6922

Thank you for your interest and action in this critical matter,

Dean Buchinger
Coordinator, Five State
Exotic fruit fly coalition

Animal Disease Biotechnology Facility
Washington State University
Pullman, Washington

Comments submitted by

Dick Coon, Secretary-Treasurer
Bar U Ranch Company, Inc.
Box 627
Washtucna, WA 99371
Past President, Washington Cattlemen's Association

Borje K. Gustafsson, Dean
College of Veterinary Medicine
Washington State University
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Lance E. Perryman, Associate Dean for Research
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Executive Summary

These comments are submitted in support of funding for construction of the Animal Disease Biotechnology Facility (ADBF) at Washington State University, under the auspices of the United States Department of Agriculture Cooperative State Research Service (USDA CSRS) Buildings and Facilities Program. The project has been competitively reviewed and deemed nationally important in resolving disease problems of agricultural animals. The proposed facility is unique among USDA Buildings and Facilities projects because its entire focus is on use of molecular biology to resolve diseases of agricultural animals. Research conducted in the facility will insure a safe and abundant human food supply, improve the health of agricultural animals produced in the U.S., and provide research training for the next generations of scientists responsible for these important goals. Federal matching funds ($11.5 million) for construction of the ADBF are requested. No federal funds are, or ever will be, requested for operation of the facility once construction is completed.

Animal Disease Biotechnology Facility Program Goals

This request is for new facilities to sustain and expand the research, extension, and training programs necessary for the resolution of important disease problems in agricultural animals. Proposed is construction of an Animal Disease Biotechnology Facility (ADBF) associated with the existing Bustad Veterinary Sciences Building and the new Veterinary Teaching Hospital currently under construction and slated for completion in 1995.

The ADBF will contain approximately 42,000 net square feet of research and support laboratories, and office space dedicated to improved diagnosis, prevention, and control of diseases. The program focus will be on development and implementation of procedures at the molecular level. Immediate and long term benefits to the nation will be derived through development of products that prevent disease in agricultural animals. The products will include vaccines, diagnostic tests, and therapeutic agents. Human and animal health and well-being will be enhanced through prevention, improved diagnosis, and effective treatment of infectious diseases important to both agricultural animals and humans. Overall animal well-being and productivity will also be improved.

The ADBF-housed program will train the next generation of scientists qualified to assume leadership positions in government, industrial, and university laboratories across the USA. These individuals, in turn, will increase the impact of the Animal Disease Biotechnology Facility by delivering technology, products, and training skills throughout the world.

Investigators in the College of Veterinary Medicine at WSU have established effective, dedicated collaboration with United States Department of Agriculture, Agriculture Research Service, Animal Disease Research Unit (USDA-ARS-ADRU) personnel to meet ADBF program goals. Both groups will be jointly housed in the ADBF. These scientists lead research programs in food safety, involving studies of *E. coli* 0157:H7 and *Salmonella*. In addition, they have identified economically-important viral, rickettsial, bacterial, protozoal, and parasitic diseases. Resolution of economically significant diseases of agricultural animals, and related health and production problems, requires an understanding of disease mechanisms at the cellular and molecular level. Diagnosis, prevention, and control of infectious diseases is enhanced when the causative aspects of an infectious agent are defined. Operations support for these research programs is obtained through competition for extramural grants. In FY 1993, approximately $2.5 million in research funds were awarded from the National Institutes of Health alone. This indicates the human as well as animal health significance of research conducted by program investigators.

Today, investigators from WSU and the USDA-ARS-ADRU are skilled in production of monoclonal antibodies; the identification of relevant surface antigens; the cloning, amplification, sequencing, and expression of genes which encode them; and the mapping of epitopes defined by antibodies of interest. Investigators to be housed in the ADBF have established a unique three stage approach to the ultimate resolution of targeted disease problems. The first step requires identification of new and emerging disease problems in the field by veterinary scientists trained in identification and field study of disease problems. They are members of a unique Field Disease Investigative Unit established at Washington State University. Appropriate samples are collected for study in the research laboratories of the ADBF. In this second step, the power of molecular biology is applied to the identification of important antigens and genes for potential use in vaccines, diagnostic tests, and therapeutic agents. The third step involves use of a unique, in-place, Technology Transfer Laboratory. Here, investigators convert basic laboratory observations to the

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vaccines, diagnostic tests, and treatments intended for use by society. These products are tested by veterinary scientists through the Field Disease Investigative Unit who started the process by their initial recognition of the important disease problem in the field.

During the integrated three stage process of disease identification, molecular investigation, and product development, there are abundant opportunities to train the next generation of investigators. ADBF scientists have established programs to train molecular biologists committed and able to resolve diseases of regional, national, and international importance in agricultural animals. This training is essential to correct society's critical shortage of capable scientists needed worldwide in government, academic, and industrial laboratories. Training is supported, in part, through two institutional training grants from the National Institutes of Health, and an institutional biotechnology training grant from USDA.

The College of Veterinary Medicine at Washington State University

Washington State University's College of Veterinary Medicine is the fifth oldest among the 27 veterinary colleges in the U.S. and the sixth oldest in North America. It is the flagship institution in the Washington, Oregon, and Idaho (WOI) Regional Program in Veterinary Medical Education. The WOI program also serves Alaska, Arizona, Hawaii, Montana, Nevada, New Mexico, North Dakota, Utah, and Wyoming through the Western Interstate Commission for Higher Education Compact.

The Doctor of Veterinary Medicine degree is awarded respectively by Washington State University (WSU) and Oregon State University. The University of Idaho is a full member in the regional program, but Idaho students receive their degrees from WSU.

The WSU College of Veterinary Medicine is accredited by the American Veterinary Medical Association (AVMA). It is one of only ten veterinary colleges in the country that is fully accredited by the American Association for Accreditation of Laboratory Animal Care. The College also operates the Washington Animal Disease Diagnostic Laboratory, which is accredited by the American Association of Veterinary Laboratory Diagnosticians. The college has operated continuously since 1899, serving the needs of the state, western region, and nation through quality instruction, innovative research, and extensive service.

To accomplish mandated goals in teaching, research and service, and to maintain full accreditation from the AVMA, the WSU College of Veterinary Medicine must obtain modern facilities that comply with state and federal guidelines. To that end, the State of Washington has appropriated $28.6 million to construct a new veterinary teaching hospital (VTH) on the WSU campus. Groundbreaking occurred in the summer of 1991, and the facility will be completed in 1995. The VTH will replace inadequate clinical teaching and hospital facilities, and allow the college to meet teaching and service objectives related to animal care and well-being.

The Animal Disease Biotechnology Facility (ADBF) will be constructed

immediately adjacent to the VTH. It will provide office and laboratory space required to meet teaching, research, and service objectives related to diagnosis and prevention of diseases in animals. Both the VTH and the ADBF are required to achieve and maintain full accreditation from the AVMA.

The ADBF has received federal approval following competitive review by the United States Department of Agriculture, Cooperative State Research Service, Building and Facilities Program. Federal allocations have been received for site selection and development of architectural plans. The balance of federal allocations is now needed to complete construction of the ADBF.

Financial Summary

The ADBF is projected to cost $23,400,000. Detailed architectural work began in November, 1991, the estimated date of groundbreaking is June, 1994, and the anticipated date of completion is July, 1996.

Federal appropriations of $5,420,360 have been received through FY 1993. To meet the target dates listed above, and to effectively coordinate construction with that of the VTH, $11,500,000 is requested for FY 1994. The balance (approximately $7,000,000) will be requested in FY 1995. These dates and dollar amounts are consistent with the application approved by the USDA Cooperative State Research Service in 1991.

adbftext

**BEFORE THE SUBCOMMITTEE ON
RURAL DEVELOPMENT, AGRICULTURE, FDA, AND RELATED AGENCIES
OF THE HOUSE COMMITTEE ON APPROPRIATIONS**

**HORTICULTURAL CROPS RESEARCH FACILITY
IN PARLIER, CALIFORNIA**

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Submitted: April 14, 1993

SUMMARY OF REQUEST

Forty-two (42) California agriculture and related industries (Attachment I) request that the Committee include in its fiscal year 1994 appropriations, $2.8 million for planning and design funds for the Agricultural Research Service (ARS) for the construction of a Horticultural Crops Research facility in Parlier, California to replace the existing facility in Fresno, California.

It is also requested that the Committee include language, if necessary, authorizing that funds from the sale of existing land and facilities at Fresno be used for the development of the replacement facility at Parlier.

BEFORE THE SUBCOMMITTEE ON
RURAL DEVELOPMENT, AGRICULTURE, FDA, AND RELATED AGENCIES
OF THE HOUSE COMMITTEE ON APPROPRIATIONS

HORTICULTURAL CROPS RESEARCH FACILITY IN PARLIER, CALIFORNIA

We request that the FY 1994 appropriations bill include $2.8 million for the Agricultural Research Service (ARS) for final planning and design for the construction of a new facility in Parlier, California to replace the existing facility in Fresno, California. We do so in behalf of 42 fresh fruit, vegetable, fiber, dried fruit and nuts and speciality crop industries. (Attachment I) We believe that this facility provides valuable research that benefits the nation's agriculture as a whole.

In fiscal year 1993 the Congress appropriated $1.27 million to be used by the ARS for three ARS facilities including Parlier. The agency allocated $300,000 for preliminary planning and design work at the Parlier site.

The Fresno facility is recognized nationally and internationally for its valuable research. However, if effective research is to continue, new facilities are vitally needed. The original buildings were constructed in the 1920's and are not adequate for state-of-the-art research. Residential and commercial encroachment is also a problem. The cost of construction of those facilities and specialized equipment is estimated to be approximately $35 million based on a 1996 final construction date. The construction of this facility will allow for the continuation of existing research and significantly improve the capabilities of the ARS to provide even greater benefits to agriculture and therefore the consumer, not only in the western United States, but nationally. $2.8 million is necessary to complete final planning and design so that preparations can be made for construction shortly thereafter. It is important that research keep pace with the critical issues facing agriculture, such as production and marketing of commodities; preserving air, water, soil quality; post-harvest quality of crops; and the removal of quarantine barriers. Resolution of these problems is essential if we are to sustain our domestic and export markets.

The ARS has now purchased the necessary land for the construction of a new facility in Parlier, California. It is also requested that, if necessary, language be included in the fiscal year 1994 bill providing authority to sell existing land and facilities and to use the proceeds for the purchase of specialized equipment and further development of the replacement facility at Parlier.

The scientific staff of the ARS Fresno facility is uniquely qualified to continue and expand research in numerous critical areas. However, in order to do so effectively, there is a need to replace the facilities. Replacement is long overdue and we wish to communicate the critical importance of this need to the future of agriculture.

Thank you for the opportunity to present testimony in support of this vital research facility.

ATTACHMENT I

Facility List

Pat Honchell
Alfalfa Seed Production Res. Board
531-D North Alta Avenue
Dinuba, CA 93618

Steve Easter
Blue Diamond Growers
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Sacramento, CA 95812

Gene Stokes
Cal. Apricot Advisory Board
1280 Boulevard Way, Suite 107
Walnut Creek, CA 94595

Patty Bowman
Cal. Artichoke Advisory Bd.
P. O. Box 747
Castroville, CA 95012

Mark Affleck
California Avocado Commission
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Santa Ana, CA 92705

Ben Goodwin
California Beet Growers Assn.
2 West Swain Road
Stockton, CA 95027

Ron Schuler
Cal. Canning Peach Assn.
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Layfayette, CA 94549

Gerald Munson
Cal. Cantaloupe Adv. Board
531-D No. Alta Avenue
Dinuba, CA 93618

Dana Dickey
California Celery Advisory Board
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Dinuba, CA 93618

Joel Nelson
California Citrus Mutual
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Visalia, CA 93279

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California Cling Peach Adv. Bd.
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1900 N. Gateway Blvd. #156
Fresno, CA 93727

K.B. Smith
California Cotton Ginners Assn.
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Fresno, CA 93727

Henry Voss
Cal. Dept. of Food & Agriculture
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Frank Mosebar
California Dried Fruit Assn.
P. O. Box 270-A
Santa Clara, CA 95052

Gerald Munson
Cal. Dry Bean Advisory Bd.
531-D No. Alta Avenue
Dinuba, CA 93618

Ron Klamm
California Fig Advisory Board
3425 N. First St., Suite 109
Fresno, CA 93726

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Ed Beckman
Cal. Fresh Market Tomato Adv. Bd.
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Fresno, CA 93727

Mike Durando
Cal. Grape & Tree Fruit League
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Wade Whitfield
Cal. Iceberg Lettuce Commission
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Monterey, CA 93942

Mark Houston
Cal. Kiwifruit Commission
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Jean Peltier
California Pear Growers
77 Cadillac Drive
Sacramento, CA 95825

Brian Blain
California Pecan Growers Assn.
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Visalia, CA 93277

Ron Sether
California Pistachio Commission
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Fresno, CA 93727

Tom Cherry
California Planting Cotton Seed Dist.
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Bakersfield, CA 93302

Jim Melban
California Potato Research Advisory Bd.
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Richard Peterson
California Prune Board
5990 Stoneridge Dr. #101
Pleasanton, CA 94588-2706

Clyde Nef
Cal. Raisin Advisory Board
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Fresno, CA 93726

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Washington State Tree Fruit Research Commission
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Dave Riggs
California Strawberry Advisory Board
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Bruce Obbink
Cal. Table Grape Commission
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Richard Douglas
Sun-Sweet Prune Growers
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Richard Douglas
Valley Fig Growers
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Winter Pear Conrol Commission
601 Woodlark Bldg.
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Richy

RICHY INTERNATIONAL CORP.
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HARLINGEN, TX 78552-8978
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April 1, 1993

The Honorable Richard J. Durban, Chairman
Subcommittee on Appropriations
Rural Development, Agriculture and Related Agencies
U.S. House of Representatives
Washington D.C. 20515

Dear Congressman:

As the Congress begins consideration of FY 94 allocation, my wife and I gather that it is appropriate juncture to submit to you the testimony on all the facts and benefits we obtained from using high health shrimp seed and our future perspective for your continuous support to the U.S. Marine Shrimp Farming Program (MSFP) of the Gulf Coast Research Laboratory Consortium.

Your honor, my wife and I retired as a senior high school computer and English teacher in 1990 and a nuclear power engineer in 1991 respectively from Taipei, Taiwan. Obviously we had no previous and pragmatic experiences on shrimp farming prior to making our investment to this industry in this country in April, 1990. Our shrimp farm consists of three five-acre ponds located in a shrimp farm complex of 85 ponds in total, in Arroyo City, Cameron County, Texas. Most of the intensive growout ponds were operated by an aquaculture consulting firm during 1990 and 1991 growout seasons under lease and/or technical support. For these two years, the consulting firm and other farmers purchased and stocked almost entire post larvae, the head start shrimps, from Ecuador.

The 1990 commercial size shrimp production by these firms seemed to be inferior, but the same practice applied to 1991 created a disaster. A normal average production by using high health shrimp seed in the 5-acre ponds could obtain 16,000 pounds to 25,000 pounds per pond, whereas in 1991, pond harvest only had few thousands pounds to as high as only 11,000 pounds. The consulting company defaulted payment to its clients and even let the complex deteriorated after 1991 growout season.

During the 1990 and 1991 growout season, my wife and I started to learn the U.S. Marine Shrimp Farming Program executed by the Gulf Coast Research Consortium. We also began to realize how systematic and team-working process was taking place in this productive, self-sustaining and self-reliance industry in the United States for the years to come. Taiwan, for example, had bloom years for growing Penaeus monodon (tiger shrimp) creating domestic affluent consumption

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need and to create huge export surplus, was then destroyed almost overnight in 1987 due to pathogen and disease propagation between growout ponds. Pathogen free and disease control are among major creative and preventive areas shrimp program need to be emphasized in order to be successful. In addition, selection of broodstock, maturation, larval rearing, growout research, shrimp health management and their supportive hardware and software system should be managed in such a way to support field farmers, in order to jointly accomplish integral objectives. Example of failure on Taiwan's monodon due to lack of integral, systematic and team-work effort, to my personal judgement, would not happen here in the country where a prudent plan such as MSFP are well coordinated and implemented.

Your honor, after the consultant default trauma, my wife and I started our own farming efforts during 1992. Shrimp post larvae was essentially obtained from the Oceanic Institute in Hawaii through the Harlingen Shrimp Farms Hatchery in Cameron County, Texas. Growout season extended through May to October, 1992. In addition to our own three ponds, we had additional 12 ponds joining together stocked with in average 1,050,000 baby shrimp for each pond. Harvest during mid October, 1992 through early November, 1992 indicated a production more than 16,000 pounds of tail per pond up to 26,000 pounds. MSFP has shown signs of success from inexperienced individuals like my wife and me. Continuous efforts to support current MSFP, from a shrimp farmer's point of view, would secure and increase productivity.

Your honor, it is true shrimp farming relies heavily on genetically improved stocks, sufficient number of high health juvenile animal and selective breeding efforts. To my humble opinion, it is also true that areas are probably needed to look into and covered by a future program for this industry in appropriate phase for the still young industry.

1. Address to regulatory bodies minimum or zero impact of shrimp farming to environment.

2. Aquaculture shrimp products have equivalent nutrition value and are as healthy food as natural products.

3. Shrimp farming is another form of farming.

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Your honor, every single experience of my previous years was nuclear power. After becoming a shrimp farmer, I realize shrimp farming is just as sophisticated. Sophistication is not the key issue, however, the key issue is how we contribute to the society with valuable input. Shrimp farming will continue to share its contribution to human society with high value food sources. It will be achieved only when successful research and development program on all aspects of shrimp is supported and prudently thrusted. Personally, I appreciate to the program, the people who execute the program, to the congress and particularly to you, your honor.

Sincerely yours,

D. C. Yao

Da-chyuan Yao
Richy International Corp.

cc: The Honorable Dale Bumpers, Chairman

Dr. Gary D. Pruder, Consortium Coordinator

STATE OF COLORADO

COLORADO WATER CONSERVATION BOARD
Department of Natural Resources

721 State Centennial Building
1313 Sherman Street
Denver, Colorado 80203
Phone (303) 866-3441
FAX (303) 866-4474

Roy Romer
Governor

Ken Salazar
Executive Director, DNR

Daries C. Lile, P.E.
Director, CWCB

April 7, 1993

The Honorable Richard J. Durbin, Chairman
Subcommittee on Rural Development,
Agriculture and Related Agencies
House Appropriations Committee
2362 Rayburn Building
Washington, D.C. 20515

Dear Representative Durbin:

This letter transmits three copies of the written statement of the State of Colorado to your subcommittee concerning FY 1994 appropriations for the U.S. Department of Agriculture Colorado River Salinity Control Program onfarm activities. The State of Colorado respectfully suggests that these activities be funded at the level endorsed by the Advisory Council and appreciates this opportunity to state its position for the written record.

Sincerely,

Daries C. Lile, P.E.
Director

DCL/gl/bj

cc: Roy Romer, Governor, State of Colorado
Ken Salazar, Executive Director
Colorado Department of Natural Resources
Board Members, Colorado Water Conservation Board
Colorado Congressional Delegation
David Robbins
J. David Holm
Jack Barnett

RJD.stm

STATEMENT OF
THE STATE OF COLORADO

BEFORE THE
SUBCOMMITTEE ON RURAL DEVELOPMENT,
AGRICULTURE AND RELATED AGENCIES
HOUSE APPROPRIATIONS COMMITTEE
ON FY 1994 APPROPRIATIONS FOR
U.S. DEPARTMENT OF AGRICULTURE COLORADO RIVER SALINITY
CONTROL PROGRAM PROJECTS

Summary of Requests

Colorado supports the U.S. Department of Agriculture Colorado River Salinity Control Program onfarm projects in our state and throughout the River Basin and respectfully requests that Congress appropriate $18,400,000 for this highly effective cost-share program in fiscal year 1994.

Introduction

This statement is submitted by the Honorable Roy Romer, Governor of Colorado; Mr. Ken Salazar, Executive Director of the Colorado Department of Natural Resources; and Daries C. Lile, Director of the Colorado Water Conservation Board, which is the state agency charged with the development of Colorado's water resources.

Colorado River Salinity Program Appropriation

The seven states of the Colorado River Basin have endorsed a coordinated, basinwide approach to the reduction of salinity in the Colorado River. The onfarm salinity control activities being planned and constructed by the Soil Conservation Service, other branches of the USDA, and the local cost-share participants are an integral component of the overall salinity control program. The Colorado River Basin Salinity Control Forum and Advisory Council, acting on behalf of the seven Basin States has submitted a detailed statement to this subcommittee. The Forum seeks, and Colorado supports, appropriations above the level provided last year.

The onfarm activities of USDA have recently become a major focus of efforts to reduce the salinity of the Colorado River. PL98-569, the 1984 Amendments to the Colorado River Basin Salinity Control Act, recognized the importance of onfarm salinity control activities and established specific line item funding for the federal share (49%) of this USDA program. Recent studies demonstrate the significant and cost-effective salt reduction achievable through onfarm irrigation improvements.

Three of the five current project sites are located in Colorado: Grand Valley, Lower Gunnison, and McElmo Creek. These voluntary programs are oversubscribed by farmers ready, willing, and able to make changes in irrigation practices and pay their fair share (30%) of project costs under the USDA program. Of particular concern to the State is that reduced levels of funding are preventing full realization of potential cost-effective salinity reduction by keeping willing participants on the sidelines. The situation in Colorado is being repeated elsewhere in the Basin.

The Colorado River Basin Salinity Control Advisory Council, established by the Colorado River Basin Salinity Control Act of 1974, consists of members from the seven Basin States, including Colorado. The Advisory Council is charged with making recommendations to the responsible federal agencies on appropriate means of controlling the salinity of the Colorado River. In its 1992 Annual Report, the Council finds that the USDA program needs minimum funding in FY 1994 of $18.4 million to keep pace with the salinity reduction required to meet water quality criteria for the lower Colorado River. The Council appreciated the success of USDA salinity control efforts to date and strongly urged that $18.4 million be appropriated, as the minimal funding required for the program to be successful in maintaining salinity within the federally mandated and state adopted numeric criteria.

The State of Colorado recognizes the extraordinary pressures on Congress and the President to resolve the difficult budget questions facing the nation. However, the onfarm salinity program has only recently entered its implementation stage and funding levels limited to earlier appropriation amounts will severely cripple this evolving effort.

Over the past few years USDA field personnel have nurtured this program and created widespread acceptance for it among local irrigators. Due to this planning and educational effort the onfarm program is beginning to reach its potential and to make significant contributions to improved Basin water quality. Funding at the level of previous years will keep many farmers from participating in a program in which USDA has already invested substantial time and money.

Further, as studies have repeatedly demonstrated, delays in implementation of salinity controls do not merely defer expenditures into future years, but result in the need for a larger, more costly overall program. This is a result of the increased accumulation of salt that enters the system during the period of delay. The Advisory Council's plan of implementation calls for further increments of increased USDA funding in FY 95 and 96. Shortages in FY 94 will only make the appropriation process that much more difficult in future years, and jeopardizes USDA's ability to achieve the salinity reduction potentially available and necessary to meet program objectives. The State of Colorado therefore urges that the full $18.4 million necessary for USDA onfarm activities be appropriated in FY 1994.

Thank you for your assistance in this important program.

University of Hawai'i at Mānoa

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Office of the Dean and Director

April 14, 1993

The Honorable Richard J. Durbin
Chairman, Appropriations Subcommittee on Rural
Development, Agriculture, and Related Agencies
U. S. House of Representatives
2362 Rayburn House Office Building
Washington, D. C. 20515-6016

Dear Mr. Chairman:

As chairman of the land-grant directors in the American Pacific, I respectively submit three copies of written testimony for the public witness hearings held by your committee. In this testimony, we ask your continued support of the Agricultural Development in the American Pacific (ADAP) Project.

Unfortunately, distance and travel expense preclude our appearing before you personally. Should you or your staff have questions, we would welcome the opportunity to answer them.

Thank you for your consideration.

Sincerely,

N. P. Kefford
Chairman of the Directors
of the ADAP Project.

An Equal Opportunity/Affirmative Action Institution

TESTIMONY

submitted to
The Agriculture, Rural Development, Food and Drug Administration, and Related Agencies
Subcommittee on Appropriations
April 1993

Concerning
Agricultural Development in the American Pacific

Written Statement by

Noel P. Kefford, Dean, College of Tropical Agriculture and Human Resources, University of Hawaii

Chin-Tian Lee, Dean, College of Agriculture and Life Sciences
University of Guam

Antonio Santos, Director, Land Grant Program
Northern Marianas Community College

Anita Suta, Director, Land Grant Program
College of Micronesia

and

Pemerika Tauili'ili, Director, Land Grant Program
American Samoa Community College

Mr. Chairman and members of the Subcommittee, we, the Land-Grant directors from the American Pacific islands, thank you for the opportunity to share our views on the Agricultural Development in the American Pacific project. The land grant programs from the American Pacific includes American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Hawaii, and the Freely Associated States of Micronesia. Our goal remains collaborative efforts to accelerate agricultural development in our region. We are committed to this goal and respectfully submit this statement to you.

Again we reiterate that the problems faced by us in this region are unique and we believe we offer unique solutions for this extremely large geographical region called the American Pacific. It merits repeating that the size of the region offers a wealth of resources and diversity and at the same time the region is so large and the demands so great that any efforts at rational development require a level of regional coordination and collaboration unlike any other region of the country. Without your support, we are certain that we would be far behind in addressing the pressing agricultural needs of our region. We are indebted to you and request your continued support.

This past year, 1992, was a pivotal year for the project with an evaluation of our experiences over the first four years and the development of a strategic plan for the next five years. The American Pacific Land Grant Directors initiated this process to build upon the enthusiasm and working relationships among Pacific Land-Grant personnel and to channel this collaborative energy into more focused programs. In the first four years of this program, we have convincingly demonstrated that a mutually empowering network among the five Land-Grant institutions in the Pacific is not only possible but productive. Given this, the directors have invested in long range planning to ensure future effectiveness of the collaborative network created.

With the help of two experienced resource people from the region and two from the U.S. Department of Agriculture, the Directors conducted an intensive evaluation of client and in-house needs, lessons learned from the first four years of working together, and generated a five year strategic plan. This plan was finalized in August of 1992.

The mission statement adopted, in its simplest form is: *The ADAP project is a mechanism to address common regional client-base issues while maintaining the cultural, social, economic, and environmental integrity of the region.* While there were several goals and objectives developed during the planning process, the one overriding goal was *to develop sustainable agricultural production systems focused on defined market opportunity/needs and on local health, nutrition, and food safety needs.*

Accomplishments during the past year have already started to reflect client based (i.e., end user) projects. Three types of examples are illustrative of the activities during the past year. First, there is continued emphasis on developing the Land-Grant faculty and staff in the region. These individuals along with the agricultural community are the hope for the future agricultural development in the region. This is especially the case since many of the Land-Grant institutions in question are very young. Some were created in the 1980's. Toward this end, the programs in American Samoa and the Northern Marianas have articulated courses with the University of Hawaii (the oldest and most established of the institutions in the region). In addition, staff in the region have developed such expertise in the area of biological control of pests that they were major participants in a Pacific wide symposium on biological control. Prior to the creation of this program, neither would have occurred.

Second, land grant staff in the region have conclusively confirmed the effectiveness of a specific parasite to control a leaf-footed insect that has plagued the production of melon type crops in the region. Farmers on Guam and Pohnpei, for example, have reported healthier and less misshapen fruit in their cucumber crops as a result of use of these parasites. These impacts occurred in the context of a control method that is not high cost or environmentally damaging.

Third, in response to a need to develop modes of agriculture low in purchased inputs, land-grant staff have developed demonstration sites in Guam, Saipan, and American Samoa to show farmers how to use trees along with food crop production. It has been shown that trees not only have fuel value but provide windbreaks for crops, prevents soil erosion, and fix nitrogen for use by food crops. These demonstrations are vivid examples of the type of activity consistent with sustainable development of the agricultural resources of the region.

We believe we are moving to the next and higher level of activity in the region. The level of cooperation and collaboration remains as high as ever. The goals and objectives set for the next five years are well articulated and reflect the true needs of the region. It is clear that the next few years will be most demanding on staff and institutions. The focus is clearly on serving the needs of clients in a practical way. This will come about through creative but practical research with constant awareness of the need to transfer results to end users. Equally important is the need to ensure that clients are involved in the definition of the kinds of information to be developed through applied research. A regional approach to solving the problems of the agricultural community is the force that binds us together and provides us a strong base for success.

We again extend an open invitation to members of the Committee to visit our region. We welcome the opportunity to show you the problems we are addressing, the context in which we are addressing them, and the kinds of solutions that we are offering.

We ask your continued support for a project which will have major implications for the development of agriculture in the American Pacific. We appreciate the opportunity to submit testimony in support of the Agricultural Development in the American Pacific Project. Thank you for permitting us to do so.

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April 14, 1993

The Honorable Richard J. Durbin
Chairman, Appropriations Subcommittee on Rural
Development, Agriculture, and Related Agencies
U. S. House of Representatives
2362 Rayburn House Office Building
Washington, D. C. 20515-6016

Dear Mr. Chairman:

I respectively submit three copies of written testimony for the public witness hearings held by your committee. In this testimony, I ask your continued support for the Tropical and Subtropical Agricultural Research Program.

Unfortunately, distance and travel expense preclude my appearing before you personally. Should you or your staff have questions, I would welcome the opportunity to answer them.

Thank you for your consideration.

Sincerely,

N. P. Kefford
Dean and Director

TESTIMONY

submitted to
The Agriculture, Rural Development, Food and Drug Administration and Related Agencies
Subcommittee on Appropriations
April 1993

Concerning
Tropical and Subtropical Agricultural Research

Written Statement by

Noel P. Kefford, Dean, College of Tropical Agriculture and Human Resources, University of Hawaii

Mr. Chairman and members of the Committee, I appreciate the opportunity to submit this testimony to you on behalf of the Pacific Basin Administrative Group (PBAG) in support of the Tropical and Subtropical Agriculture Research program. We continue to believe that this is one of the most important programs pertaining to agricultural research in the tropical and subtropical regions of our country. Without its continuance, much of the fundamental information needed to maintain a strong agricultural base in the region would no longer be available. We respectfully ask for your continued support of this program so critical to the Pacific and Caribbean Basins.

The Tropical and Subtropical Agricultural Research Program is a partnership of the USDA and American universities in the tropics (U. of Florida, U. of Guam, U. of Hawaii, U. of Puerto Rico, U. of the Virgin Islands). The program goal is to fill knowledge gaps, solve critical problems, and develop new market opportunities for enhanced tropical agro-ecosystems and high-quality tropical agricultural products for the benefit of U.S. citizens.

The Tropical and Subtropical Agricultural Research Program is a sound investment in America because it helps (1) re-tool our rural labor force in transition to a diversified and integrated agricultural system that enhances youth, families and communities in the tropical and subtropical regions of the U.S., (2) develop and implement sustainable natural resource management strategies that enhance tropical agro-ecosystems, and (3) derive new and cost-competitive agricultural products and technologies from the American Caribbean and Pacific basins that enhance the U.S. economy. A substantial return on investment is being realized by American citizens in the tropics and other parts of the nation through the dedication and achievements of program's professionals.

The Tropical and Subtropical Agricultural Research Program promotes teamwork for creating solutions to human and natural resource problems in the tropics such as balancing tropical agriculture and the tropical environment, finding new foods and nonfood uses and markets for tropical agricultural products, improving food quality and safety for improved human health in the tropics, and disseminating useful information to empower the people of the American Caribbean and Pacific basins to achieve their life destinies. By action through American land grant universities in the tropics, the program helps deliver and fulfill the American dream to U.S. citizens living in tropical and subtropical regions of the nation.

Legislative Origins

The current Special Research Grant program in Tropical and Subtropical Agriculture Research has its legislative origin in Section 406 of PL 89-808. Section 406 was an outgrowth of the World Food Conference held in Rome, Italy, in November 1974. At that conference, U.S. representatives announced that the United States could not "feed the world," but would contribute to the assistance of developing countries in efforts to strengthen their own food production capabilities.

Section 406 authorized the U.S. Secretary of Agriculture to: (1) Enter into research contracts and cooperative agreements with Land-Grant Universities and other appropriate research institutions; (2) Conduct research on crop and food products and make the results available to friendly developing nations; (3) Increase cooperation with the Peace Corps, Agency for International Development, and foundations to accomplish the overall mission of the program; and (4) Authorize expenditures up to $33 million annually to accomplish the missions of the program.

In recent years, this program has been funded as a Special Research Grant as authorized by section 2(c) of Public Law 89-106 as amended (7 U.S.C. 450i).

Intent and Scope of the Program

The program supports research on the organisms, environments, and processes of tropical agricultural systems of the American-affiliated Pacific area. There are currently 55 active projects focusing on critical agricultural problems in the Pacific region. The program provides assistance to domestic agriculture in many ways, including research on tropical and subtropical crops presently grown in the U.S., control of threatening pests, enhancement of the genetic stocks for many major U.S. Crops, protection and conservation of soil and water resources, and the development of technologies important to the small farmer. The program's research projects deal with high priority areas which should result in solutions to critical problems as well as develop new opportunities for agricultural production, information technology, and marketing competitiveness in the tropics and subtropics of the Pacific Basin and elsewhere.

Accomplishments

Success and relevance characterize this program because it is internally dynamic in addressing the changing needs and opportunities of the Caribbean and Pacific basins; highly productive in developing sustainable agroecosystems for use by a unique population of Americans; providing new crops and technologies and alternative uses of existing crops in tropical and subtropical regions of the U.S.; and contributing significantly to societal and economic development of a stressed and often overlooked segment of U.S. citizens.

In 1992, forty research projects (33 Hawaii, 7 Guam) were funded for research to help solve agricultural problems and improve agricultural productivity in Hawaii and Guam. Research was conducted mainly in the areas of crop physiology and culture and plant diseases and insects.

Examples of research being conducted are:

- identifying the types of the early blight disease that infests bananas , tomatoes, and heliconia; use of molecular genetics to find lettuce plants that are resistant to the serious virus diseases of lettuce;
- determining if the plant pigment chlorophyll has any properties that might be useful for cancer prevention;
- identifying the influence of soil erosion caused by rainfall on water quality;
- use of nitrogen fixing plants to increase corn yields in the alley cropping system;
- determining the biology of Phytophthora, a serious plant pathogen, in order to devise new control methods;
- using tissue culture and molecular biology methods to develop superior new Dendrobium orchid hybrid flowers;
- evaluating the production of a special type of palm in Hawaii for palm hearts (this would be a new Hawaii crop);
- improving the quality of taro for food use;
- optimizing the use of a soil fumigant to control damaging soil insects while reducing chemical emissions into the atmosphere;
- controlling the thrips insect that carries the tomato spotted wilt virus from one tomato plant to another;
- determining the best fertilizer treatments to use for grass grown on golf courses used by tourists; and,
- evaluating legume crops that can be grown and then plowed into the soil as fertilizer for vegetable crops (this would reduce the need for chemical fertilizers).

Focus for 1993

The four main areas of activity scheduled for 1993 are as follows:

- Development of human resources in tropical agricultural production and consumption systems. Specific topics include rural revitalization studies to improve the social and economic well-being of rural families and communities; and, information for business plan development supporting crop diversification

- Management of tropical crops and pests for enhanced productivity, economic potential, and environmental protection. Specific topics include mechanisms for biological control strategies; and, improvements in nutritional quality of food crops.

- Characterization and design of sustainable agroecosystems. Specific topics include decision support systems to facilitate information technology transfer and utilization; and, agroforestry and forestry applications for long-term environmental integrity and economic viability.

- Application of biotechnology to sustainable tropical agroecosystems. Specific topics include genetic mechanisms for mitigating impacts of plant and animal stress on productivity; and, diagnostic tools for screening and predicting pest infestations and crop and livestock diseases

Request for Continued Support

Real world challenges (e.g., ensuring that American agricultural products will compete profitably in the global market; creating job opportunities for American workers in a vitalized, diversified agricultural sector; and, effectively mitigating global environmental change) are facing rural communities in the American Caribbean and Pacific. Fortunately, through the Tropical and Subtropical Agricultural Research Program, rapid progress in knowledge-based development to address these issues is being accomplished.

Mr. Chairman and members of the Committee, in the above. I have described the accomplishments and plans for a research program that is critical to the well being of those Americans who reside in the tropical and subtropical regions of the United States. Those of us in the Pacific Basin work closely with our colleagues in the Caribbean Basin. We believe that this program is not only of critical importance to our respective basins but also is an example of research which maintains a fine balance between good science and practical problems facing the people we serve.

We urge your continued support.

TESTIMONY OF

DR. J. LARRY BROWN, DIRECTOR

CENTER ON HUNGER, POVERTY AND NUTRITION POLICY

TUFTS UNIVERSITY

BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON

RURAL DEVELOPMENT, AGRICULTURE, AND RELATED AGENCIES

TUESDAY, APRIL 20, 1993

Mr. Chairman and Members of the Subcommittee, first let me thank you for giving me the opportunity to testify before your Subcommittee. While I am indeed honored to provide testimony, I am saddened that the real originator of this project, Dr. Jean Mayer, cannot be here today. As you know, just a few months ago this distinguished President of Tufts University passed away. Many of you on this Committee and many others in Congress knew Dr. Mayer and, like all of us, were deeply affected by the purpose and passion of his work. No one in America has given more to the field of nutrition and been more dedicated to doing something about hunger than Dr. Mayer. All of us will miss him personally and, of course, we will miss his leadership.

The Center for Hunger, Poverty and Nutrition Policy was his most recent and major initiative. It was his vision to take Tufts' extraordinary resources in the area of nutrition and to marshal them to wage a truly effective war on hunger in this country. He was very proud of the fact that when Department of Agriculture performed a feasibility study to examine the need for facilities to house this Center, the result was a very strong recommendation. As you know, that recommendation was supported by this Subcommittee and by Congress with small appropriations in the last two years, principally to perform the planning work. I am here today to urge this committee to approve the nearly $12 million to complete this effort.

I might add that we are at a stage where such an effort can put people to work in a relatively short period of time and thus enhance our economy.

As Dr. Mayer indicated in the past, the overall cost of this project is in excess of $30 million, and Tufts University is fully committed to staffing and operating it. For the last several years we have worked very closely with the staff of the Department of Agriculture and together we have shaped, modified and improved the concept of this Center. Today we believe that our plan and efforts can truly make a difference, and frankly, that effort is necessary now more than ever.

Recently, the Center on Hunger, Poverty and Nutrition Policy completed a study of child poverty in America over the last 30 years. That study, as well as others, has produced some alarming results that force us, I believe, to rededicate our efforts to finally solving this problem. Our study concluded that in the last 20 years the number of American children in poverty has increased by 37% adding nearly four million children to the poverty rolls. Unless we move forward in a thoughtful and deliberate manner, by the year 2010 America will be a Nation where more than 20 million children are poor.

The Center for Hunger, Poverty and Nutrition Policy cannot and will not alone solve the problems of hunger, but I am convinced, as was Dr. Mayer and the staff of the Department of Agriculture, that we can make a real difference. As has been indicated to

this Subcommittee in the past, our new Center can effectively link research and sound educational programs -- a combination necessary to finally win the war on hunger. Our Center will bring together the faculty and staff of the School of Nutrition, the Human Nutrition Center on Aging, the scientific resources and medical resources of the Tufts Medical School and the New England Medical Center. And through that unique collaboration, the Center can play a leading role in developing plans to battle hunger in America.

Finally, let me say our new Secretary of Agriculture, former Congressman Mike Espy, was very supportive of this Center. He wrote to Secretary Madigan in the Bush Administration to express his support and it is our hope that he will continue that support in his new role.

Finally, Dr. Mayer was fond of noting that each year Congress spends approximately $35 billion on food and nutrition programs. His vision for the Center on Hunger, Poverty and Nutrition Policy was to assist in leading us to spend those dollars more efficiently and effectively. We may not have his presence but we have the benefit of his vision, his inspiration and his first hand work on the project. I am confident that those efforts can bear fruit.

We are grateful for your support in the past and with your continued support, we look forward to completing this project in the near future.

National Rural Cooperative Development Task Force

Steering Committee

Rod Nilsestuen
Chairman
WI Federation of Cooperatives

Mike Cook
University of Missouri

Terry Baird
Associated Cooperatives

Allen Gerber
MN Association of Cooperatives

Dennis Johnson
St. Paul Bank

Steve Krikava
Land O'Lakes

Tom Lyon
21st Century Genetics

Dwight Oberschlake
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A National Demonstration Project for Rural Revitalization Based on Sectoral Linkages

Statement of Testimony
to the
Subcommittee on Rural Development, Agriculture and Related Agencies

House Committee on Appropriations

by
Judy K. Ziewacz, Director
National Rural Cooperative Devleopment Task Force

April 23, 1992

Summary

Community-based development is not a sufficient strategy for rural economic development in a global economy. Therefore, the National Rural Cooperative Development Task Force seeks an increase, from $1 million to $5.1 million, in funding for the national demonstration project that is based on sectoral linkages as a more appropriate rural revitalization strategy.

The Economic Research Service (ERS) of USDA states that the key disadvantages of rural areas in the United States to be (1) small scale and low density; (2) economic specialization of rural places; and (3) remoteness and distance.

At the turn of the century, small, isolated farmers forged cooperatives to develop horizontal links to each other. Working together, they improved access to capital markets, electricity and telephone services, production records, improved genetics, and other services. They pooled their purchasing power to buy fuel, seed, fertilizer, insurance and other products at lower costs. In their commodity groups, they worked with the land grant system to target research on the critical constraints that held productivity back. Just as importantly, farmers organized marketing cooperatives to develop vertical links that enable a farmer in South Dakota to sell his wheat in international markets.

The purpose of the national demonstration project is to replicate the strategy used by farmers in other business and human service sectors in rural areas. Members of the Task Force have undertaken specific projects to demonstrate how vertical and horizontal linkages within sectors -- small secondary wood product manufacturers, rural Emergency Medical Service providers, micro-enterprises -- create a sufficient economy of scale to overcome the inherent disadvantages of rural areas.

The project will also demonstrate how local leaders from diverse organizations can work together in regional partnerships to create opportunities for jobs, deliver human services and leverage their resources. The regions will further link themselves together to replicate successes, avoid duplication and purchase specific education and research. From the local to national levels, the process is user-driven, not government directed.

If funded at the $5.1 million level -- a seventy-five percent match for the $2 million in non-federal dollars available for projects across the country -- the national pilot will demonstrate the need to define "community" on a sector rather than geographic basis for economic development purposes.

I thank the Chairman and members of the Subcommittee for this opportunity to describe the demonstration project of the National Rural Cooperative Development Task Force. Since the mid-1980s, an increasing number of people seeking solutions for rural revitalization have decided to use the cooperative model. Some call them strategic

alliances, collaborative partnerships, or networks. Regardless of the name, they share the same development strategy: linking entities by sector into a sufficient economy of scale to overcome the inherent economic disadvantages of rural areas.

Establishing cooperatives or similar entities is the most difficult of development to achieve. Forging sectoral linkages goes against the grain of the predominant theories of development -- that it must be community-based and that the American economy was built on competition -- not cooperation. We believe that the predominant theories of development are not sufficient, and perhaps illogical public policy for rural economic development in a global economy. We propose testing in other sectors the most comprehensive and successful rural development strategy ever developed and funded by the federal government.

At a time when rural and agricultural development were synonymous, Teddy Roosevelt's Country Life Commission of 1909 recommended cooperatives as a means to improve economies of scale and strengthen the vertical and horizontal linkages in agricultural production, input supply and infrastructure development for rural America.

Today, few of us can imagine what the U.S.'s agricultural sector would be without marketing and supply cooperatives, the farm credit system, rural electric and telephone cooperatives, rural water associations, mutual insurance companies, and other collaborative partnerships that provide economies of scale and strengthen vertical and horizontal linkages among the businesses and institutions that serve agriculture. The federal government's systems-approach to sectoral development combined with the ingenuity and investment of farmers and their cooperatives has resulted in an extremely productive and internationally-competitive agriculture sector.

Objectives of the National Demonstration Project

The underlying premise of our national demonstration project is that isolation and diseconomies of scale create critical bottlenecks to rural economic development. If these bottlenecks are removed (or their impact lessened), then progress proceeds until a new bottleneck impedes development. To eliminate these bottlenecks, the objectives of this project are to:

* Through cooperative endeavors, establish vertical and horizontal linkages within sectors for strategic importance to rural America that have few rural industries and agribusinesses, high levels of unemployment or underemployment, high rates of out-migration, and low levels of per capita income.

* Link targeted sectors to external sources of technology, capital, information, and services in federal and state agencies, land grant universities, extension, local development organizations, and regional/national industry associations to reduce geographic and institutional isolation in rural areas.

* Solve specific developmental problems in targeted sectors (e.g., help family

farmers produce and market lean pork to compete with integrator, help migrant workers organize a producers cooperative to grow and market specialty vegetables and spices for the Latino population in urban centers, and provide board development training to minority-owned community cooperatives in the South).

* To provide a vehicle for population groups and communities historically outside the mainstream of the small business sector to access resources, technical assistance, and training to create cooperative businesses, including community development credit unions, producer and worker-owned cooperatives.

* Investigate and test how cooperatives and collaborative partnerships can serve as a vehicle for technology transfer, adaptation of existing technologies, commercialization of new products, and value-added processing of new agricultural and forest products.

Regions and Projects

Eight regions will use the $1 million appropriated in the FY93 Agriculture Appropriations bill to replicate the cooperative model in other sectors. Although the law requires only twenty-five percent, the regions bring a fifty-percent match to the table. The following summarizes the regions and their projects:

Northeast (New England States): (1) link existing cooperatives to national and international markets through a telecommunications network; (2) assist local groups in New England states that are trying to develop innovative multi-community collaboration; (3) assist a group of New England organic and low-input farmers develop urban markets; and (4) work with county planners at the local level to help develop linkages that could strengthen local economic.

Upper Midwest (Wisconsin, Minnesota and Iowa): (1) develop and test a cooperative model to help Iowa hog producers to produce and market 51% or more lean pork by providing an integrated production system that makes available lean pork genetics, redesign of swine facilities, improved feed formulations, management assistance, and record-keeping systems in collaboration with the University of Iowa, and marketing agreements with Conroy Farmers Cooperative; (2) utilize value-added technologies developed by the Minnesota-based Agricultural Utilization and Research Institute to establish two marketing and processing cooperatives of specialty crop producers; (3) provide technical assistance to establish the **Wisconsin Early Stage Cooperative Revolving Loan Fund**, a collaborative partnership between electric cooperatives, leaders of established agricultural cooperatives, the University of Wisconsin-Extension, and others.

Mississippi River Delta (currently Arkansas): (1) through **Arkansas Wood Manufacturers**, a recently organized network of secondary wood products manufacturers, expand services aimed at improving the competitiveness of the industry in global markets, including joint purchasing of group health and product liability insurance; (2) test a hybrid cooperative marketing model, **WoodWorks, Inc.**, to expand sales of value-added, non-commodity wood products that can be replicated in other industries and regions; (3) expand the **MetalWorking Connection** from a regional manufacturing network of 60 small metal fabricating shops to a broader geographically based network; and (4) demonstrate the economic impact on rural employment, sales, and value-added of strengthening horizontal and vertical linkages in the metal fabrication and secondary wood products industries.

Pacific Northwest (primarily Washington): (1) assist a group of former migrant workers to organize

Cooperativa de Trabjadores Migratorios, a producer cooperative in the Yakima Valley of eastern Washington, that will grow specialty vegetables for the large, urban Latino population of the state; (2) help an emerging group for wood products manufacturing networks in eight timber-dependent counties organize a regional network; (3) provide technical assistance to migrant workers organizing **Cooperativa Forestal de Oregon,** a worker-owned cooperative of reforestation workers. The cooperative will operate under subcontract with independent brokers who bid on government and timber industry contracts; and (4) working with the State of Washington Employee Ownership Program, make retiring small business owners aware of selling their businesses to employees.

The Dakotas (currently North Dakota): (1) assist four of 11 emerging and planned cooperative from among the following:

Name	Type	Status
Central Growers	Potato processing	Business plan
Dakota GWRS Pasta Co.	Durum to pasta	In construction
Food Dist. Cooperative	Food ingredient	Feasibility
Industrial Oil Seed	Refining oil seeds	Feasibility
Bison Cooperative	Processing bison	Feasibility
Cattle FDRS	Backgrounding calves	Business plan
Aquaculture	Fish production	Feasibility
North West Bird Seed	Bird seed marketing	Business plan
Portland Bean	Edible bean processing	Share drive
Quality Pork	Farrow to finish	Launch
SW Wheat Mill	Specialty flour	Feasibility

(2) develop training programs for emerging cooperatives at the Quentin Burdick Center at North Dakota State University focusing on cooperative law, tax codes, capital formation, marketing; and (3) provide technical assistance to create a fund for early equity in emerging strategically important cooperatives.

Western States Region (currently California): (1) develop a training cooperative among local government units in collaboration with the UCD Medical school to train rural emergency medical services (EMS) providers that serve sparse and geographically dispersed populations in rural California; (2) establish a cooperative rental kitchen for small-scale food processing businesses, in collaboration with **FoodWorks,** a business incubator that helps displaced women and minorities create home-based food processing; (3) help 96 Trinity county workers displaced by reductions in harvests from the national forest to develop markets for their products through multiple-store chain outlets; and (4) create a development team of board and management to provide on site guidance to strengthen the operations, capital base and management of six small consumer cooperatives.

Southeast Region: (1) develop marketing relationships between minority-owned farmer and long-established agricultural marketing cooperatives to link disadvantaged farmers to national and international markets; (2) create a collaborative partnership to overcome historic barriers and secure advice, participation, expertise and assistance form appropriate businesses, industry, universities, extension, and government agencies to supplement and support the education and training programs; and (3) create effective educational and training programs that provide the tools necessary for minority farmers to retain their land and stop out-migration.

Great Plains Region (currently Kansas): (1) determine value-added agricultural enterprises most appropriate to improve Kansas' rural economy; (2) learn from the experience of other regions in value-added processing, and commercialization of alternative agricultural products; (3) develop working partnerships with local and state economic development agencies, nonprofit organizations, and state and federal agencies that can assist in the development of value-added agricultural enterprises; and, (4) lay the groundwork for a multi-state Great Plains Cooperative Development Center.

Conclusion

Over ninety organizations are members of the National Rural Cooperative Development Task Force. We believe that in addition to our strategy for rural revitalization, we have created a paradigm which brings the leadership of existing rural organizations together with their combined human and financial resources to again use the cooperative self-help model with a federal investment for technical assistance to foster sustainable rural economic development. Some might suggest we are re-inventing government. We would submit we are helping to re-invigorate the most comprehensive and successful rural development strategy ever developed and funded by the federal government.

We hope the members of the Subcommittee agree and increase the funding level from $1 million to $5.1 million in the FY94 Agriculture Appropriations bill so that this partnership can be expanded. The $5.1 million is far short of the $50 million authorized in Section 2347 of the 1990 Farm Bill, but it would provide core funding to create the capacity to insure the success of these projects and improve the economic opportunities of rural America.

NCBA
National Cooperative Business Association

STATEMENT OF TESTIMONY

to the

Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies

House Committee on Appropriations

by

Mr. Robert D. Scherer
President and CEO
National Cooperative Business Association

April 23, 1993

The National Cooperative Business Association endorses and supports the statement of the National Cooperative Rural Development Task Force relative to funding for the national demonstration project on regional cooperative development centers.

NCBA supports increasing funding for Fiscal Year 1994 to the $5.1 million level ... roughly 10 percent of the authorized level. Cooperatives across America have pledged matching funds for that spending, and it's time to put that capital to work in our rural areas. NCBA and its members actively supported passage of the Rural Development Act as part of the 1990 Farm Bill, and we established the National Cooperative Rural Development Task Force to pursue the establishment of the regional centers.

We understand and support the need to constrain spending in order to reduce the nation's budget deficit and the national debt. However, we strongly support President Clinton's call for redirecting federal spending into programs that represent an "investment" in America, and we consider the establishment of these centers to be a prime example of federal investment that will pay many dividends over the years to come. A coordinated, cooperative approach to rural economic development will generate business activity and income that will raise federal revenues and pay back this relatively small federal outlay many times over.

Cooperatives are, by their very nature and structure, ideally suited as effective tools for economic development. Because they are "member driven" -- managed by a board of directors elected by the total membership of the cooperative on a one-person, one-vote basis -- cooperatives guarantee the active participation of the local community that is seeking to spur economic development.

Because their primary purpose is to provide services desired by the members who join together to form the cooperative, they are

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able to accomplish goals that another company, driven by the need to maximize income, cannot. Revenues generated by cooperatives are put to providing services to the members or are returned to the members in the form of dividends.

The National Cooperative Business Association has assumed the mission of strengthening and expanding the cooperative form of business. NCBA takes that mission seriously, and seeks to promote the use of cooperatives as an ideal part of any economic development efforts.

The National Cooperative Business Association (NCBA) is a national, cross-industry membership and trade association representing cooperatives--over 100 million Americans and 45,000 businesses ranging in size from small buying clubs to businesses included in the Fortune 500. Founded in 1916 and known for many years as the Cooperative League of the USA, NCBA's membership includes cooperative businesses in the fields of housing, health care, finance, insurance, child care, agricultural marketing and supply, rural utilities and consumer goods and services as well as state and national associations of cooperatives.

NCBA represents cooperatives before Congress and the federal agencies and promotes and supports cooperatives in the U.S. and overseas through training and technical assistance publications and programs.

Agricultural and Food Policy Center
Department of Agricultural Economics
College of Agriculture and Life Sciences
Texas A&M University

April 21, 1993

The Honorable Richard Durbin, Chairman
House Appropriations Subcommittee on Agriculture
2362 Rayburn HOB
Washington, D.C. 20515

Dear Chairman Durbin:

Attached is testimony prepared for the record in support of appropriations for the Economic Research Service (ERS) and the Foreign Agriculture Services (FAS). The Agricultural and Food Policy Center's teaching, research, and extension program is dependent on data obtained from ERS and FAS. This testimony explains how we use data supplied by ERS and FAS to respond to Congressional requests for analyses of policy options.

We encourage your continued support for appropriations to ERS and FAS as a means of maintaining both the quantity and quality of data.

Sincerely,

Ronald D. Knutson, Director
Ag. and Food Policy Center

RDK/dh

Attachment

USEFULNESS OF DATA AND ANALYSES CONDUCTED BY ECONOMIC RESEARCH SERVICE/USDA AND FOREIGN AGRICULTURE SERVICE/USDA

submitted to

Agriculture Subcommittee
House Appropriations Committee

by

Professors Ronald D. Knutson, James W. Richardson,
John B. Penson, C. Parr Rosson, Edward G. Smith, and Joe L. Outlaw
Agricultural and Food Policy Center
Texas A&M University System

The purpose of this statement is to place in the record of the Agriculture Appropriations Subcommittee the importance of ERS and FAS data to the research, teaching, and extension mission of the Agricultural and Food Policy Center (AFPC) at Texas A&M University. As you know, AFPC does extensive research on the impacts of proposed changes in agricultural and food policy. The majority of the AFPC research program results from requests by members of Congress, primarily those who serve on the Agriculture Committees.

AFPC prides itself in its ability to supply to Congress objective independent third party economic analyses. In doing our job, we are not the advocates of particular policy options. Our research is heavily dependent on data supplied by ERS and FAS economists. Those data are supplied to us in a usable form specific to the research for which it is intended -- not just raw data collected by other agencies such as the National Agriculture Statistics Service (NASS/USDA). The remainder of this statement is designed to indicate specifically how we utilize ERS and FAS data to answer the questions asked by Congress.

Costs and Returns Data

Among the data that is most useful to us is that collected by NASS for ERS (Cost of Production Survey) on the costs, returns, and financial conditions of farmers located in major production areas throughout the United States. The results of these surveys are published in the ERS economic indicators series. Of particular usefulness to us are the cost of production estimates developed by ERS. We utilize this data to analyze the responsiveness of farmers in terms of production levels to changes in price. We also utilize the ERS Farm Cost and Returns Survey to augment and/or validate our own producer panel data. The Cost and Returns Survey provides data on debt levels for different size farms in major production areas, as well as information to validate representative farm data collected from producer panels. Taken together, the Cost of Production and Farm Costs and Returns Surveys provide much of the data necessary for AFPC to respond to policy questions raised by the House and Senate Agricultural Committees; in particular, to questions related to the farm level or regional impacts of policy changes.

Price and Quantity Data Series

Much of the commodity analyses that we conduct utilize series on prices, production, imports, domestic use, exports and ending stocks for individual crop and livestock commodities. These time series data, maintained by ERS economists, are absolutely essential to sound analyses of agricultural and food policy decisions conducted for the Administration or the Congress. It underlies everything from the calculation of elasticities used to quickly assess impacts of trade to more complex models which project future commodity supply and disappearance.

Sector Economic Performance Data Series

ERS has maintained income, expenditure, and net farm income data for much of this century. This agency has also maintained important balance sheet information since the 1940s. These data are vitally important to understanding the economic performance and financial strength of agriculture and how it might change under alternative policies. Information contained in these accounts helps analysts spot trends in financial stress on our nation's farmers and ranchers. These data also provide the basis for projecting future credit needs in agriculture and how changes in macroeconomic and farm commodity policy affect farm input purchases, farmland values, and net worth of farm businesses.

Foreign Production, Consumption, and Price Data

In the past two decades, U.S. agriculture has become export dependent. In many respects, this dependence is a direct result of policy decisions made by both the Congress and the executive branches of government. In other respects, export dependence is the result of the global interdependence of the nations and the peoples of the world. Understanding the nature of this interdependence is as critical to expanding markets as it is to solving world food and nutrition problems. Developing this understanding is dependent on data developed and analyzed by FAS economists.

For example, we utilize FAS data to evaluate potential impacts of NAFTA on U.S. agriculture. Data reflecting the acreage, yield, production, consumption, and trade of major commodities is critical to sound, objective trade policy analysis. For instance, to determine the impacts of NAFTA on U.S. meat and livestock industries required the use of FAS data on Mexican cattle herd size, location, and type of animal. Data on Mexican prices for meats are

especially difficult to obtain. FAS, in its GEDES report, provides this information in a timely manner.

Foreign market trends in consumption of agricultural goods also are important. In estimating NAFTA impacts on the U.S. dairy industry, FAS data have been crucial in analyzing changes in consumption patterns, market potential, and trade prospects.

Finally, foreign policies related to agriculture are often difficult to obtain. FAS is one of the few sources of this type of information. Without reliable policy information, it is nearly impossible to conduct sound trade policy analyses.

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

CENTER FOR FOREST PRODUCTS MARKETING
Department of Wood Science and Forest Products
1650 Ramble Rd., Blacksburg, Virginia 24061-0503
Phone: (703) 231-5876 Fax: (703) 231-8868

April 19, 1993

Honorable Richard J. Durbin
Chairman
House Subcommittee on Agriculture, Rural
Development, FDA, and Related Agencies
2362 Rayburn House
Washington, D.C. 20515-6016

Dear Congressman Durbin:

Please submit the attached proposal as written testimony on behalf of the Center for Forest Products Marketing. The Center, a cooperative venture of Virginia Tech, various public agencies, and numerous industry supporters, requests $500,000 per year for fiscal years 1994 through 1997. The funding will be used to broaden, strengthen and develop research and educational activities of benefit to the forest products industries, young persons preparing for employment, and the public in general.

The Center is a part of Virginia Tech's College of Forestry and Wildlife Resources and Department of Wood Science and Forest Products. It is the nation's premier Ph.D. granter and a leader in forest products research and education. The Center requests federal funding to help educate the public and industry, locate new markets, and make the forest products industry stronger, more efficient, and more responsive to the needs and concerns of society.

Thank you for your assistance in this matter, we hope we can count on your support.

Sincerely,

John W. Punches
Center for Forest Products Marketing

enc.

A Special Appropriation Proposal to the Subcommittee on Rural Development, Agriculture and Related Agencies

THE CENTER FOR FOREST PRODUCTS MARKETING

A National Research and Training Center

Requesting Agency: The Center for Forest Products Marketing
Department of Wood Science and Forest Products
College of Forestry and Wildlife Resources
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061-0503

Contact Persons: John Punches
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Dr. Geza Ifju
Department Head
Phone: 703 231 - 8853
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Amount Requested: $500,000/year

Duration: 4 years

Rural Economic Development

Economic progress begins with our ability to extract food, fuels and raw materials from nature in an environmentally responsible manner. Natural raw materials must then be converted into useful products, and these products marketed in an exchange economy. Most of the United States' rural areas have abundant timber supplies and already employ significant numbers of workers to produce a wide array of wood and wood fiber products. However, the economic potential of our forests is now being under-utilized. Furthermore, in the midst of rising environmental concerns, raw material shortages, escalating materials costs, and a declining resource base, the forest products industry faces an uncertain future.

We are faced with a national crisis in our forest products industry, an industry critical to rural economies. The industry lacks the information it needs to:

* Justify the costs of better stewardship of our forest resources to grow more and higher quality timber;

* Market new products that employ more efficient use of wood materials;

* Add greater value to the forest products now being manufactured and be more competitive in both domestic and international markets;

* Generate more jobs, especially in rural areas;

* Attract its next generation of employees.

If these benefits are to be realized, our universities must do a better job of educating students and the public about the forest products industries, of providing sound information to the industry, and in general, of promoting the wise and efficient use of our renewable natural resources.

Better knowledge of present and potential markets for forest products is required. The U.S.D.A. has long recognized the economic importance of the forest products industry by supporting research to improve the processing of forest products. What is needed now is a similar effort to provide the market information and high quality employees the industry needs if it is to prosper.

New markets and products are essential to the long-term growth of an industry. Research conducted by the Center for Forest Products Marketing will identify new market opportunities and investigate trends in existing markets.

Rapid technological advancement in recent years has resulted in new wood-based products. Many utilize what was previously considered wood waste. Others involved recycled wood products. These new products promise to reduce industry's demand on the forest resource base. In other words, products made from wood waste or recycled wood can allow society's needs to be fulfilled by a smaller harvest of trees. This can only be realized if industry has the ability to profitably market alternative wood products.

The Center's efforts will lead to new products and more efficient marketing of existing products. A healthy industry will provide more job opportunities and allow companies to justify the costs of forest stewardship.

Industry has recognized a need for individuals trained in forest products marketing and management. In the midst of declining enrollment in the nation's wood science and forest products programs, Virginia Tech's program continues to grow. Thus, the importance of the Center will increase on a nationwide scale in the foreseeable future. The training the Center provides will ensure a supply of highly qualified employees - employees that are essential to the future success of forest products companies.

The Center for Forest Products Marketing

The Center for Forest Products Marketing is a cooperative venture of the forest products industry, various public agencies, and Virginia Polytechnic Institute and State University.

The Center has three goals:

(1) To train marketing-oriented people for employment in the forest products and related industries, and to train new educators and researchers in forest products marketing.

(2) To be a continuing source of marketing research to help maintain and enhance the competitiveness of U.S. forest products industries.

(3) To promote wise stewardship of our renewable forest resource for economic growth and to meet society's expanding needs for affordable and environmentally sound wood and fiber products.

The Center currently has 47 industry members and continues to grow. A Special Appropriation will leverage industry and university funds, allowing the Center to develop into a significant National Research and Training Center. The Center is the only one of its kind in North America and is the premier Ph.D. granting educational program in forest products marketing. It provides unique training for future industry employees and at the same time uses marketing research activities as a tool to train the educators and scientists of the future.

The Center is responsive to the needs of both industry and government. Its Board of Directors includes industry representatives elected by its industry supporters and scientists from the U.S.D.A. Forest Service and U.S.D.A. Cooperative State Research Service. The Center's programs reach beyond the borders of Virginia, providing valuable services to the forest products industries nationwide. Unfortunately, it is this national scope that makes state support of the Center unlikely, as the majority of its industry members are not located in the state of Virginia.

A state university can no longer provide the level of funding necessary for a program of the Center's nature to prosper. Federal assistance is necessary to fund new research, increase teaching resources, enhance student recruitment efforts, and perhaps most importantly, provide a show of strength that will attract further industry support and eventually make the Center self-sustaining.

Forest Products Marketing at Virginia Polytechnic Institute and State University

The U.S.D.A. National Needs Fellowship Program has identified forest products marketing as an area in critical need of more scientists and educators. Virginia Polytechnic Institute and State University has had an outstanding undergraduate and graduate program in forest products marketing for nearly a decade. It offers B.S., M.S., M.F., and Ph.D. degrees, and has the largest forest products marketing graduate program in North America.

The forest products marketing research program at Virginia Polytechnic Institute and State University is the leader in its field. For example, over the past five years it produced over 35 percent of all marketing articles published in *Forest Products Journal.* The U.S.D.A. Competitive Grants Program in Forest and Rangeland Resources, and the National Needs Fellowship Program have recognized the program by awarding it their only grants in forest products marketing.

A recent survey of administrators of university forest products programs in the United States ranked the Department of Wood Science and Forest Products at Virginia Polytechnic Institute and State University as the nation's top program. The department was judged by a team of scientists from the Society of Wood Science and Technology as having one of the best teaching, research, and extension programs in the country. Through a competitive process, the State Council of Higher Education for Virginia named the Department a Commonwealth Center of Excellence. The Department was identified by the National Academy of Science as having the breadth and strength to develop into a national center of significance. The Center for Forest Products Marketing is an integral part of Virginia Tech's Department of Wood Science and Forest Products.

Federal Funding

Last year Congress funded initiatives for wood utilization research, recognizing specific programs in three states. The Center for Forest Products Marketing asks the Appropriations Committee to consider funding for marketing research and education related to the forest products industries. Funding for the Center for Forest Products Marketing will address the need for training and research in forest product marketing, resulting in increased industrial productivity, efficiency, and competitiveness. Our nation will be the ultimate beneficiary.

VERN F. HIGHLEY
GOVERNMENT RELATIONS

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April 22, 1993

The Honorable Richard J. Durbin
Chairman
Subcommittee On Agriculture,
Rural Development, FDA and Related Agencies
House Appropriations Committee
2362 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Durbin:

On behalf of the Whitefly Management Committee of Imperial County and the Lower Colorado River Basin in California, I respectfully ask that you insert the attached statement into the record of testimony covering research needs for U.S. Department of Agriculture involvement in Fiscal Year 1994.

The statement provides an overview of the whitefly problem that has plagued the desert agriculture region of Southern California. Damage to the economy caused by the pest, both to planted crops and due to prevented plantings, has had a particularly acute impact on this region that is heavily dependent on agricultural crop production.

I felt that you and the Committee would like to know something about the comprehensive research effort undertaken by the Whitefly Management Committee in addition to the work that agencies such as the U.S. Department of Agriculture are performing to corral this very defiant pest.

No doubt you are hearing other reports of the whitefly's spread into agricultural areas in numerous parts of the U.S. This is all the more reason to try and hasten an effective control program such as embraced by state, university, and USDA elements in a five-year National Research and Action Plan. Key USDA agencies involved will need increased funding over present allocations. The ARS, for example, will need an additional $5,000,000 in base funds over the next three years to sustain its role in the action plan. Funding for APHIS involvement in the plan amounts to $3,000,000 in FY 1993. We are hopeful that this amount can be increased to $3,500,000 for FY 1994 to support an Integrated Pest Management project that control practices must incorporate. Also, we are hopeful that additional funding can be made available to the CSRS for whitefly research that would make use of the important research capability of the Extension Service.

The Whitefly Management Committee is deeply appreciative to the Committee for its concern about the crisis that our producers have experienced with the whitefly as well as its interest in seeing this problem solved.

Sincerely,

Vern F. Highley

STATEMENT BY THE WHITEFLY MANAGEMENT COMMITTEE OF IMPERIAL COUNTY (CALIF.) AND LOWER COLORADO RIVER BASIN

HOUSE COMMITTEE ON APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FDA, AND RELATED

April 22, 1993

Overview Of The Whitefly Menace, Its Devastation, And Economic Impact In Southern California

The Whitefly Management Committee (WMC) was formed out of desperation in the fall of 1991 by agricultural producers in Imperial County and lower Colorado River Basin (covering desert farming areas of Southern California) to formulate a strategy for combatting *bemisia tabaci* now commonly called the silverleaf (sweetpotato) whitefly. It is comprised of 16 committee members representing a cross-section of farming interests from Imperial County, Blythe and Coachella in Riverside County, and Mexico. The committee has funded a number of high profile research projects with money collected from the agricultural interests of the area, as well as private donations. The Office of the Agricultural Commissioner of Imperial County has served as a clearing house and action center that includes liaisoning with numerous other whitefly-afflicted areas in the U.S. and Northwest Mexico. John Pierre Menvielle, a diversified producer near Calexico, is Chairman of the committee and Stephen Birdsall, Imperial County Agricultural Commissioner, is its Executive Officer. The WMC works closely with the state, the university system, and the cooperative effort of such USDA agencies as ARS, APHIS, CSRS, and CES.

Areas represented by the WMC suffered an overwhelming invasion of a new whitefly strain in the latter part of 1991. In a period of a few short months the whitefly menace caused agricultural crop losses of over $125 million and related economic losses of over $170 million. Several thousand jobs were lost in Imperial County due to the disaster, in an area of only 110,000 residents where unemployment often averages above 30 percent. This past summer the county led the nation in percentage unemployment. Between May 1992 and January 1993, the gross value loss attributed to whitefly damage and/or lost production amounted to $100,497,225, bringing known agricultural losses of the area in an 18-month period to above $225,000,000. As an example of lost production, Imperial County normally produces nearly 13,000 acres of fall/winter melons but only 80 acres were produced in 1992. Other crops also were cut back. Crop acreage reduction was due not only to the continued presence of the whitefly but also because of the economic setback imposed by its damage.

We now know the silverleaf whitefly is a major pest of innumerable crops such as cotton, alfalfa, cole crops, cucurbits—mainstays of farming in Imperial and Riverside Counties—and many different ornamental plants. Also it is a vector of many important diseases and new plant disorders, both in the field and even greenhouses. It has also caused major losses in Mexico, Arizona, South Texas, and Florida. Additionally it is being increasingly detected in fields of New Mexico, Mississippi, the San Joaquin Valley of California, and in such northeast locales as New Jersey's commercial greenhouses.

The Governor of California declared a state of emergency in Imperial and Riverside Counties on Nov. 9, 1991 and the U.S. Department of Agriculture was petitioned for federal disaster assistance. The USDA denied allowing our farmers' devastating crop losses to be eligible for assistance, stating a lack of connection between the flourishing of insects and a severe weather pattern. This was the decision in spite of the WMC having validated unusual climatological occurrences in and around the region. Temperatures were warmer than normal in October and most of November 1991. In the winter of 1990, the area recorded its coldest temperatures in 40 years and the situation helped drive out an earlier, controllable

strain of whitefly. The whitefly insect evolved a more efficient and devastating strain. When coupled with accelerated development brought on by higher temperatures, all control efforts were nullified and a major economic disaster occurred.

When new federal disaster assistance legislation is promulgated, certainly whitefly-caused damage as sustained by agricultural producers ... damage resulting from an insect that defied the producers' best efforts to defend against it and completely overwhelmed them ... should be eligible for assistance. Such devastation is just as painful as the result of weather-caused disasters.

Whitefly Control Efforts

Although whitefly control research is heavily dependent on federal involvement, the WMC wanted to build a fund for its own self-help involvement. Money was received from various private businesses but a large share of the fund was raised by producers paying a 10-cent per acre-foot fee for water supplied by the Imperial Irrigation District.

The WMC developed and implemented a five-point strategy for whitefly control incorporating (1) plant management (2) biological controls (3) chemicals (4) biology, and (5) application technology and has invested several hundred thousands of dollars in the projects. Its funding of projects includes research at the University of California-Riverside, the Imperial County Agricultural Extension Service, and the University of Arizona. Additionally, the WMC has been working on research projects on a local level with the Imperial County Agricultural Commissioner's Office, the California Department of Food and Agriculture, and the USDA.

Among current projects being given major focus is a cotton "edge" experiment spurred by findings in the Parker and Paloma Valley cotton area of Arizona where it was noticed that whitefly levels began at the edge of fields with the prevailing winds. A total of 18 fields is being used to test the use of predators and parasites in the middle and edges of various fields, to compare results with the use of chemicals and also in similar-sized plots using standard farming practices. This experiment further illustrates the breadth of teamwork that is being given whitefly control research. Taking part in the project are the USDA, the California Cotton Pest Control Board, the University of California, Arizona Cotton Research and Protection Council, the California Department of Food and Agriculture, and the Imperial County Agricultural Commissioner's Office.

To properly chronicle the totality of work done by the WMC and above-mentioned cooperative elements of the state, university and federal government toward whitefly control in the past 18 months would require more space than allowed for this statement. Shorter growing seasons for cotton, genetic work to develop whitefly-resistant plant varieties—including drought-resistant alfalfa which is a major crop in the region and, like cole crops and cucurbits, has suffered extensive economic damage—use of predators such as parasites and beetles, use of Section 18 for certain chemicals for immediate control and their study for baseline resistance, studies on urban ornamental plants, and a host of different cultural practices have been part of the action plan.

Additional Funding Needs

The WMC is grateful for the work done by all contributors to the research effort, especially the U.S. Department of Agriculture and the funding provided by the Congress. USDA's role in the five-year

National Research and Action Plan for the whitefly is extremely important and must be funded over the remaining several years of the project. The development of effective, long-term capabilities to manage the whitefly menace will require considerably more time, effort and money. The key USDA agencies involved in the action plan will need an increase in funding over present allocations. The ARS, for example, will need an additional $5,000,000 in base funds over the next three years to sustain its role in the action plan. Much of the ARS participation to date has been funded by the redirection of monies from other ARS programs. With the whitefly acquiring new defense mechanisms and extending into other crop areas, the ARS will need to have increased funds over and above those that have been redirected.

Funding for APHIS' participation in the whitefly action plan amounted to $3,000,000 in FY 1993 primarily for surveys and development of biological controls which are showing considerable promise. This work must continue and hopefully with the addition of an Integrated Pest Management project that would necessitate another $500,000 for a total of $3,500,000 for the new fiscal year. The WMC knows the desire of producers in the area is to develop a new and extensive Integrated Pest Management program that incorporates biological controls and considerable research will be required to do so.

Also, funding is necessary to involve the CSRS more actively in the whitefly action plan so that the tremendous research capability of the extension service can also be directed to harnessing the pest especially in the areas of biological, chemical and cropping practice controls. The National Cotton Council of America supports the IPM special grant in the hope it will provide a funding source so that state scientists can secure monies to develop the comprehensive wide area IPM programs to manage the whitefly. CSRS asks that $7,000,000 be budgeted for this program for FY 1994; FY 1993 amount was $4,457,000. The WMC concurs with the NCC in support of additional funding for CSRS.

STATEMENT OF

NATIONAL AQUACULTURE ASSOCIATION

provided to the

RURAL DEVELOPMENT, AGRICULTURE AND RELATED AGENCIES SUBCOMMITTEE

on the

FISCAL YEAR 1994 APPROPRIATIONS

Submitted by:

Joseph P. McCraren
Executive Director

Testimony to the Rural Development, Agriculture and Related Agencies Subcommittee, Committee on Appropriations for the Agriculture 1994 Budget

Aquaculture is a broad term that encompasses a diverse array of species, production techniques, support industries, organizations, occupations, etc. It ranges from the home aquarist with a few tropical fish kept for pleasure, to huge farms with millions of fish or shellfish raised for food, to public hatcheries raising fish for release for recreational use in the nation's streams and waterways. Despite this diversity, common bonds tie these different segments together. One of these is the need to have approved animal drugs available to treat or prevent disease.

Food-animal aquaculture is poised to become a major growth industry of the 21st Century. Per capita consumption of seafood in the United States grew 25 percent in the 1980's to 15 lbs./person today. The Department of Commerce has projected that total fish and shellfish consumption could increase by 30 percent between 1990 and 2000. This would require an additional one billion pounds of seafood annually to satisfy demand in the U.S. With wild stocks of seafood at peak production or, in some cases, already declining, increased supplies will need to come from farmed animals. Longer term projections are even more dramatic. Global seafood demand is projected to increase nearly 70 percent by 2025 which would require a seven-fold increase over current aquaculture production levels.

Despite being the world's largest exporter of seafood products ($2.8 billion in 1990), the U.S. is the second largest importer (over $9 billion in 1990) as well. Fisheries imports are the largest contributor to the trade deficit among agricultural products, and the second largest--after petroleum--among all natural resources products.

U.S. aquaculture has been growing rapidly, with production and revenues increasing nearly 400 percent in the 1980's. The National Fisheries Institute has estimated that the total economic impact of U.S. aquaculture is $8 billion and that the industry accounts for nearly 300,000 jobs. Still, domestic aquaculture supplies only 10-15 percent of U.S. seafood needs.

Further development of the U.S. aquaculture industry is severely constrained by a lack of approved animal drugs essential for production of fish and shellfish. The Federal Food, Drug, and Cosmetic Act (FFDCA) requires that all animal drugs must be shown to be safe and effective prior to marketing. The data to demonstrate this must be developed by the entity wishing to market the drugs. In some instances it may take more that $15 million and 8-10 years to develop the data to support the approval of an animal drug. These requirements apply to all

animal drugs used in both public and private aquaculture facilities, for both food and non-food species.

Despite aquaculture's recent growth and potential, the industry is still not large enough to support all the needed pharmaceutical company investment in data development for drugs for aquaculture species. Currently, only four approved new animal drugs are available for use in aquaculture and those are only permitted for use in certain species for specific diseases. Proper nutrition, husbandry, and integrated health management practices are the foundation for animal production, including aquaculture; however, the close confinement of animals in farm production systems necessitates the use of safe and effective animal drugs to prevent and control over 50 diseases which affect U.S. aquaculture species.

In 1992, eight compounds for which FDA new animal drug approvals are needed for aquaculture species and disease conditions, were identified as having the highest priority for public and private aquaculture. These eight were winnowed from a list of 25 compounds deemed important to controlling aquatic animal diseases. These high priority compounds are listed below in alphabetical order. There is no order of priority to this list. Each compound has been selected for uniquely different, but equally compelling, reasons. The list is offered as the bare minimum number of compounds needed in order to permit the continued production of public and private aquaculture in the U.S.

Benzalkonium Chloride: This quaternary ammonium compound is widely used by the trout industry as a disinfectant and as a treatment for bacterial gill disease. It is approved by EPA to control external bacterial infections in fish. The chemical is particularly important in coldwater aquaculture.

Chloramine-T: Investigations are now underway to support approval for control of bacterial gill disease (BGD) in salmonids. The compound also has potential to control BGD in other fish species and to treat columnaris disease in a variety of finfish.

Copper Sulfate and Chelated Copper: The compound is currently registered by EPA as an aquatic algicide and herbicide. Additional data are needed to support use to control bacteria and external parasites in fish. The chemical is particularly important in coldwater and warmwater aquaculture including the trout and catfish industries.

Erythromycin: Data are needed to support use to control bacterial kidney disease in salmonids.

Formalin (Formalin-F; Paracide-F; Parasite-S): Formalin is approved by FDA as a parasiticide for use on trout, salmon, catfish, largemouth bass and bluegill. Data are needed to support extension of the label to other fish species.

Oxytetracycline (Terramycin for fish): This compound is currently approved by FDA to control ulcer disease, furunculosis, bacterial hemorrhagic septicemia, and pseudomonas disease in salmonids and catfish and to control gaffkemia in lobsters. Data are needed to extend the label to control these and other bacterial diseases (e.g. columnaris and cold water diseases) in other aquatic species and to obtain the use of additional formulations for immersion and injection.

Potassium Permanganate: Data are needed to support its use in control of bacteria and parasites. It is especially important for culture of coldwater and warmwater fish species, including trout and catfish.

Sarafloxacin: This compound is now being registered by Abbott Laboratories to control enteric septicemia of catfish. Additional data are needed to extend the label for control of all gram negative bacteria of concern to other cultured aquatic species of economic importance.

Based on current estimates developed by the Joint Subcommittee on Aquaculture with industry participation, a funding level of $4 million annually for five years (total $20 million) is needed to obtain new animal drug approvals for these compounds.

The JSA has recommended and industry agrees that USDA's Office of Aquaculture be the entity to receive and direct Federal funding to support and coordinate aquaculture drug data development studies. All such studies would be conducted in accordance with those requirements of the Food, Drug and Cosmetic Act and implementing regulations and guidelines that apply to studies intended to be used in support of new animal drug applications.

Since the Federal government (FFDCA) requires that an animal drug be shown to be safe and effective for each disease condition in each individual species for which it is labelled for use, and because any use other than that is illegal, there will be

many situations for which obtaining approvals will be prohibitively expensive. This is especially true for public hatcheries raising small numbers of many different species. Clearly, means to reduce data requirements and associated costs need to be developed. One promising approach would be for FDA to adopt a "crop grouping" concept. This would enable target animal safety and residue depletion studies for human food safety to be performed on a few representative species instead of on every species to be included on the drug product label.

For FDA to adopt the crop grouping approach, the agency must be provided with data from comparative metabolism studies that demonstrate that various classes of drugs are metabolized similarly in different species of fish. Therefore, the JSA has recommended that funding be allocated to support studies to test the crop grouping concept, as well.

The diversity of the aquaculture industry and the large number of required investigations to support aquaculture drug approvals require careful, organized coordination of investigational efforts. Thus the JSA has further recognized the need for a national coordinator for Investigational New Animal Drug (INAD) applications and supportive activities. The JSA has developed a work plan for a National Aquaculture INAD Coordinator.

With limited funding provided by USDA, a part-time National Aquaculture Coordinator was hired in October 1992. The JSA recognizes the need for this to be a full-time position and estimates an annual cost of $150,000 over a five year period (total funding need of $750,000).

FARAD is a computer-based decision support system designed to proved food animal producers, extension specialists, and veterinarians with practical information on these drugs, pesticides, and environmental contaminants that have the greatest potential for persisting in food animals at the time of slaughter or harvest. The overall goal in providing this information is to reduce the incidence of chemical residues in foods derived from farmed animals. The USDA Extension Service provides annual funding for the base FARAD program, which does not include aquaculture species. The Extension Service provided separate support, through its National Initiative Funds, for development of an aquaculture database component of the FARAD program. Objectives of the aquaculture database have been defined.

Industry agrees that additional funding is needed to maintain the aquaculture database component of the FARAD program. Estimated funding requirements are $50,000 annually.

Summary of Required Funding Support:

Category	Annual Need (millions)	5 Year Total (millions)
Data Development/Investigations	$3.8	$19.0
Coordination	$0.15	$ 0.75
FARAD	$0.050	$ 0.25
TOTALS	$4.0	$20.0

It is our understanding that the Department of Interior's U.S. Fish & Wildlife Service and the International Association of Fish and Wildlife Agencies, the organization representing our fifty (50) state game and fish departments, will collectively contribute $3.0M per year for the next five (5) years in support of this stated need.

Mr. Chairman, on behalf of the continued viability of aquaculture, my association asks that the Subcommittee act favorably on our request for $1M annually over each of the next five years to satisfy overall funding requirements and to complement the generous contributions of the Federal/State resource agencies. Further, that these funds be made available to USDA's Office of Aquaculture and disbursed under the conditions previously stated.

If additional information is required, please do not hesitate to contact Joseph P. McCraren, Executive Director, National Aquaculture Association. His telephone number is (304)876-2251; fax (304)876-0946. We appreciate your Subcommittee's consideration of this request and are hopeful that our needs will be satisfied.

Statement to the Agricultural Appropriations Committee

Regarding

The Western Biotechnology Consortium: Agriculture and the Environment

SCOPE OF THE PROBLEM

The Critical Need to Create Jobs and Enhance U.S. Competitiveness . . .

The future growth of the economies of the Western states and the nation depends primarily on our ability to sustain technological leadership in the world in all sectors, including agriculture. A major component of America's agricultural success story has been the development and implementation of new technologies to boost production efficiency. The new technologies lead to the formation of new enterprises which provide new employment opportunities. The Western biotechnology industry is an example. Due to increased concern for environmental and health impacts of current agricultural technology and fierce competition overseas, American agricultural must rapidly implement new scientific and technological discoveries to continue to improve production efficiency in ways which are environmentally sound and safe.

. . . And Accelerate the Transfer of Research Innovations to Industry

The U.S. agricultural industry must accelerate the integration of rapidly emerging scientific and technological advances in biology, genetics and bioengineering with the more classical agricultural approaches. By application of these biotechnologies in concert with traditional agricultural technologies, it is possible to develop plants genetically engineered to withstand environmental and biological stress, plants with improved quality and unique or new plant products, animals with highly increased nutritional and reproductive efficiency and alternatives to chemical pesticides. The new biotechnologies also promise to reduce postharvest losses and to allow some currently used "environmentally unfriendly" materials and products to be replaced with biodegradable versions from renewable plant and animal sources.

The challenge to develop improved genetic pest resistance is particularly critical in the Western Region with its preponderance of horticultural or "specialty crops". The availability of chemical pest control is rapidly diminishing as manufacturers choose to remove the materials from the market place rather than expending funds for reregistration, and "minor use" horticultural crops are most likely to be left without chemical controls previously available.

Linking industry and the public sector early in development of research programs can ensure a relevance to the needs of the industry and help translate the findings into practical application.

BIOTECHNOLOGY'S OPPORTUNITIES

Biotechnology is broadly cited as an important economic development vector by state and federal governments alike. Biotechnology has a long history and refers to methods of using plants, animals, and microbes, either wholly or in part, to produce useful substances or improve existing species. Modern application of biotechnology includes the techniques of recombinant DNA, gene transfer, embryo manipulation and transfer, protoplast fusion, plant regeneration, tissue culture, monoclonal antibodies, and bioprocess engineering. Taken together, biotechnology is a truly interdisciplinary science that integrates new and classic research tools in developing innovative products and agricultural management strategies.

Many of today's emerging technologies will have immediate as well as longer term impact on agricultural research and on the production, processing, and marketing of food and fiber. Some of these technologies will find their most important roles in agriculture as supplements to traditional research. Production efficiency in the decades ahead will come to depend more on biological innovation than upon traditional resource inputs. Through biotechnology, agricultural scientists will expand their abilities to manipulate mechanisms which govern the metabolism, growth, and development of plants, animals and microorganisms.

CAPITALIZING ON THE WESTERN STATES' INTERNATIONAL PROMINENCE IN AGRICULTURE AND BIOTECHNOLOGY

The Western States occupy a unique position in the U.S. food and fiber production system - with 1990 farm income of $39.6 billion and supplying up to two-thirds of all the fruits and vegetables consumed (as well as the major share of exports). Fresh fruits and vegetables not only provide the major source of vitamins, but a growing body of evidence indicate that the consumption of fresh

fruits and vegetables play an important role in the prevention of disease. They also contribute to the quality of our nation's diet - the production of food that adds variety, the pleasure derived from different flavors, different textures, and appearance - all of the factors that contribute to the quality of life we enjoy !

The Western States also occupy an internationally prominent position in the development and application of biotechnology. The Western States have a wealth of public and private university resources in biotechnology programs and have more than one-third of the nation's biotechnology companies. They are in a unique position to develop both the new knowledge and new technology vital to capturing the promise of these biotechnologies to enhance agricultural production and at the same time conserve the natural resource base. These industrial and university strengths provide an institutional setting favorable to developing and linking advances in fundamental knowledge to ongoing applied research programs and technology development. In collaboration with industrial sponsors and their scientists, the

public and private university scientists have the opportunity to address research and development in areas of biotechnology that can significantly improve a broad range of agricultural problems.

Benefits from scientific advances will find rapid application along broad fronts of agricultural and environmental research and production. Success in the application of the new biotechnology research requires integration of the new discoveries in basic sciences into the traditional agricultural research disciplines. The existing basic disciplines and production disciplines within the Western Agricultural Experiment Stations and universities provide an advantageous situation for applying advances in biotechnology to agriculture.

This unique combination of institutional scientific expertise and private sector product development capabilities provides enormous potential for improving integration of this basic and applied research, strengthening technology transfer capabilities and speeding development of useful new products and germplasm.

THIS PROPOSAL: A UNIVERSITY/FEDERAL/PRIVATE SECTOR CONSORTIUM

Traditionally, research endeavors in industry and in universities have been largely dissociated from one another. During the past decade this has begun to change as industries look to university scientists to develop new chemicals (e.g., pharmaceuticals), organisms and processes; and as university scientists have moved into industry, either leading research groups in existing organizations or starting their own companies. The common ground between the two research enterprises is (often) societal in nature - e.g., biomedical research or problems facing the environment, problems in which industry, university scientists, and the people of the nation have a vested interest.

The initiative proposed here recognizes increasing economic and societal challenges facing U.S. agriculture and the promise of biotechnology for advancing the Western States' agriculture while enhancing and protecting the environment and natural resource base. It links the region's world class academic and industrial resources in an ambitious effort to enhance the nation's agricultural industry and increase it's competitiveness. More important, it creates an effective mechanism for more rapidly moving creative research ideas into the private sector for commercial development and fosters a culture which promotes the responsibility of both university scientists (established investigators and the students who will become future leaders) and industry to society through the maintenance of the quality of the environment. The benefits of this strategic partnership are many, including innovative and safer new products and technologies to strengthen the U.S. agricultural enterprise, higher quality and more nutritious foods for American consumers, and enhanced environmental quality.

While such an endeavor could be undertaken on a national scale, we believe it is best approached on a decentralized regional basis because crops, climate, water availability, corporate interest, and economic parameters are regional.

MISSION STATEMENT

Promote increased application of the tools of biotechnology to develop an agriculture that is environmentally sound and internationally competitive.

Examples include genetic resistance against plant and animal pests and improved mechanisms for biological control. These are particularly important to western agriculture which produces and processes two-thirds of the U.S. fruits and vegetables and whose production is challenged by the loss of chemicals used for minor crops and public concerns for food safety.

Provide a mechanism which ensures university/private sector planning, priority setting and co-funding of top priority research projects.

The availability of funding which has a prerequisite matching funding from industry and other outside sources will provide incentives for faculty and industry to interact starting with identification of critical problems and the initiation of the research program. Such collaboration will help ensure the relevance of the research to public and private sector needs as well as facilitate an awareness in the private sector of new research thrusts that have a potential for commercial development.

Enhance the rate at which new products and technologies are introduced into commercial practice which in turn will lead to new employment opportunities.

Participation of the private sector in early stages of research planning and by the investment of resources will encourage continued participation and utilization of research resources. Early identification and communication of data/information gaps needed for commercialization will shorten the time between discovery and application. The end result will be the establishment of new buisnesses, employment, and an enhanced economy.

RESEARCH AGENDA

Develop alternative, environmentally safe strategies for control of plant and animal pests and vectors of disease.

Expedite the development of new methods for plant and animal improvement.

Develop new uses for, generate new products from, and enhance the safety of harvested plant and animal products using biotechnology.

Develop bioremediation technologies to remove pesticides and other agricultural toxic compounds from soil and water.

For the above and other objectives, develop new diagnostics for agriculture application.

FUNDING FRAMEWORK

The purpose of this proposal is to seek a USDA-CSRS Special Grant to provide federal funds to support the activities of the Consortium. The target for funding is $10 million annually. These federal funds must be matched at least 1:1 with non-federal funds. The Principal Investigators are responsible for securing matching funds commitments for proposed research projects. Specific matching fund commitments are not required until the time full proposals are submitted to the Consortium for funding. The match may come from industry, commodity groups, state or local government, foundations, universities, etc. However, the match should be constructed in such a fashion that it reflects the mission of the Consortium, i.e., to ensure public/private sector planning and priority setting to enhance the rate at which new products and technologies are introduced into commercial practice.

TESTIMONY
OF
MARY J. SECCOMBE, PRESIDENT
NATIONAL ASSOCIATION
OF
RESOURCE CONSERVATION & DEVELOPMENT COUNCILS
BEFORE THE
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT,
FOOD & DRUG ADMINISTRATION AND RELATED AGENCIES

April 15, 1993

The new RC&D program is the most dynamic, exciting effort to come to rural America in years! It empowers local people to help themselves, to have a say in their future, and motivates volunteers to implement projects which create jobs, utilizes the natural resources, enhances community development, and improves the environment.

Mr. Chairman, Members of the Committee, my name is Mary J. Seccombe and I am President of the National Association of Resource Conservation and Development Councils, representing 246 RC&D Councils across the country. I am here today because we believe the RC&D Program represents one of the best chances for helping rural America improve its standing and self-worth.

RC&D is a fantastic program that has over 15,000 "grassroots" volunteers working on local problems they feel are important to improve conditions for their fellow citizens. This program is so popular that 43 applications are on hand awaiting authorization and 21 other areas have indicated they will apply by October 1, 1993. This makes a total of 474 counties who desire to join with the 1,800 counties already in the program. Here is a handout with the names of states which have or expect to have applications filed by the end of this fiscal year.

Why all this excitement? Certainly not for the money--the $32.5 million appropriaton does not allow much in the way of financial assistance. It's more of a sense of pride, a desire to do something for themselves with the help of a Soil Conservation Service coordinator. It is so exciting, those people already in the program want the rest of rural America to be able to have the same advantages they have.

We are not talking about a lot of money. An additional $18 million to help rural America--the forgotten part of the country. Eighteen million to allow another 4,000 plus volunteer citizens to help themselves. Eighteeen million to help carry out President Clinton's pledge to help rural America again become a viable force in our economy. Eighteen million to give hope to 474 counties. Eighteen million which will attract another billion dollars from other sources to rural America.

We cannot afford to pass up such an effective opportunity to give hope to rural America. I realize this is not the total answer to all of the rural woes, but the RC&D Program gives hope to local people that they do not have to settle for the status quo. Please do not deny those people who are willing to give so freely of themselves a chance to make a difference.

There are 246 RC&D Councils across the country who are "Making Things Happen!" in their areas. Making a difference using the best grassroots program the federal government has to offer. These councils are installing dry hydrants to provide fire protection and lower insurance premiums, creating jobs utilizing the area's natural resources, conserving irrigation water through better management practices, creating wetlands to improve water quality, installing timber bridges, providing assistance to entrupreneurs starting a business, encouraging tourism and recreation, and advocating "no-till" farming and hundreds of other projects all over the country. The list goes on and on. Never has so much been accomplished for so little federal dollars.

The National Association of RC&D Councils appreciates the support this committee has given the program in the past, and we hope this support will continue. I urge you to carefully think about what I have said here today and see fit to **increase the appropriation** for the RC&D--Resource Conservation and Development--Program of the Soil Conservation Service by an additional $18 million in 1994.

On behalf of the National Association, and all 15,000 volunteers from across the country, I appreciate the opportunity to present testimony before this committee. Thank you so very much.

(Attached is a copy of the handout for the record)

4/15/93

RC&D APPLICATIONS ON HAND & ANTICIPATED

State	On Hand	Anticipated	No. of Counties
Alaska	1	-	2
California	1	-	2
Georgia	2	1	31
Florida		1	5
Idaho	1	1	11
Illinois	2	1	18
Indiana		1	7
Iowa	3	1	23
Kentucky	4	1	37
Louisiana	1	1	12
Maryland	1	-	5
Michigan	1	-	15
Minnesota	-	1	9
Missouri	1	1	16
Montana	-	1	4
Nebraska	4	1	39
New Hampshire	-	1	4
New Mexico	1	-	4
New York	2	-	9
North Carolina	4	-	28
Ohio	1	-	9
Oklahoma	1	-	8
Oregon	1	-	5
Puerto Rico	1	-	4
South Carolina	1	-	12
South Dakota	2	1	15
Texas	4	4	93
Utah	2	-	8
Virginia	1	1	20
Washington	1	-	5
Wisconsin	-	1	7
Wyoming	-	1	3
TOTALS	44	21	474

THE STATE OF WYOMING

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March 29, 1993

The Honorable Richard J. Durbin, Chairman
Subcommittee on Agriculture, Rural Development,
FDA and Related Agencies
House Appropriations Committee
United States House of Representatives
2362 Rayburn House Office Building
Washington, D.C. 20515

Summary: This letter requests Fiscal Year 1994 funding in the amount of $18,400,000 for the United States Department of Agriculture's Colorado River Salinity Control Program, and supports testimony presented by the Colorado River Basin Salinity Control Forum

Dear Chairman Durbin:

I am writing in support of a Fiscal Year 1994 appropriation of $18,400,000 to the Department of Agriculture for that agency's Colorado River Salinity Control Program. You recently received testimony from the Colorado River Basin Salinity Control Forum (Forum) submitted by the Forum's Executive Director, Jack Barnett. The State of Wyoming concurs in the FY 1994 funding request and justification for that funding level set forth in the Forum's testimony.

In addition to being the Wyoming State Engineer, I represent the State of Wyoming on the Colorado River Basin Salinity Control Forum and the Colorado River Basin Salinity Control Advisory Council. As you know, the Council was created by the 1974 Colorado River Basin Salinity Control Act (Public Law 93-320). Like the Forum, the Advisory Council is composed of gubernatorial representatives of the seven Colorado River Basin states, and serves as a liaison between the seven States and the Secretaries of the Interior and Agriculture and the Administrator of the Environmental Protection Agency (EPA). It advises these Federal officials on the progress of the Federal Government's efforts to control the salinity of the Colorado River and annually makes funding recommendations, including the amount believed necessary to be expended by the USDA for its onfarm Colorado River Salinity Control Program.

With the benefit of studies and analyses made by the Department of Agriculture and the Colorado River Basin Salinity Control Forum, the Advisory Council has concluded that the present

Fiscal Year 1993 level of funding ($14,783,000) is not sufficient to keep the salinity control program on schedule with the Plan of Implementation. The Plan of Implementation and the numeric water quality criteria set for three Lower Colorado River stations constitute the State-adopted, EPA-approved, water quality standards for the Colorado River. The Advisory Council believes that an appropriation in the amount of $18,400,000 is necessary for Fiscal Year 1994. The Forum's testimony is in accordance with the Advisory Council's written recommendations. Falling behind the schedule set forth in the Plan raises vitally important questions about whether the Basin States can be assured that the water quality numeric criteria, established as a component of the Water Quality Standards for the Colorado River, will continue to be complied with in the future.

The Advisory Council, in its 1992 Annual Report, recommended the appropriation of $18,400,000 for Fiscal Year 1994, $22,200,000 in Fiscal Year 1995 and $26,900,000 for Fiscal Year 1996. Should these necessary funding levels in Fiscal Year 1994 and future years not be provided, the progress achieved by the USDA Colorado River Salinity Control Program will fall far short of the level contained in the Plan of Implementation, which has been specifically designed and jointly developed by the States and Federal agencies to ensure continuing compliance with the numeric water quality criteria for salinity. In addition, a funding shortfall at present will undoubtedly result in significantly higher costs to implement the same level of salinity control through the CRSC Program in future years.

I wish to thank you for the opportunity to submit this letter and would request, in addition to your consideration of its contents, that you make it a part of the formal hearing record concerning Fiscal Year 1994 appropriations for the Department of Agriculture. In accordance with the Subcommittee's direction, I have submitted three copies of this letter.

With best regards,

Gordon W. Fassett

Gordon W. Fassett
State Engineer

GWF/JWS/js

cc: The Honorable Craig Thomas, United States Representative
The Honorable Mike Sullivan, Governor, State of Wyoming

March 30, 1993

STATEMENT FILED WITH THE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION AND RELATED AGENCIES
by

James P. Houck, President
American Agricultural Economics Association

I appreciate the opportunity to place this short statement into the record of this committee. The American Agricultural Economics Association (AAEA) is a professional society of about 4,500 members. Our primary objective is to further the systematic development and dissemination of knowledge about the economics of agriculture, food, rural communities, and natural resources in order to benefit both the national and international economy. I am privileged to be the elected president of this organization for the 1992-93 year.

The central purpose of this statement is to register concern about the proposed cuts in the budgets and programs of the Economic Research Service (ERS) of the U.S. Department of Agriculture (USDA). My understanding is that a cut of some $8 million (13.6%) is being planned against ERS' current budget of $59 million for the coming fiscal year with further cuts programmed for later years. Budget cuts of this magnitude will seriously undermine the ability of the United States government to generate and provide objective knowledge and information about crucial sectors of the national and global economy urgently needed at this difficult time in our history.

New and unbiased knowledge about agriculture, food, rural communities, and natural resources comes mainly from research and the development of accurate data. The work of ERS is absolutely central to this process. Moreover, ERS is widely known as the core location of applied economic expertise for many agencies of the federal government as well as for the legislative branch. Its influence and value extend far beyond agriculture and related issues. (I might say, at this point, that ERS employees comprise fewer than 6% of the AAEA's current membership.)

For more than 30 years, ERS has carried out four very important programs and performed them very well. These programs are (1) Situation and Outlook, (2) Research and Data Development,(3) Economic and Social Indicators, and (4) Staff Analysis.

Situation and Outlook

The ERS Situation and Outlook program provides intelligence and analysis about short-run and long-run conditions in food and agricultural markets both at home and abroad. This information is essential to the operation and management of many large public programs and is very important for the private sector. Each year ERS publishes about 150 situation and outlook reports on 30 different topics, from Aquaculture to Food Costs to Farm Income to the Former Soviet Union. What we know collectively about this nation's agriculture, food, and related global markets is largely attributable to ERS' Situation and Outlook program.

Research and Data Development

In this functional area, ERS carries out congressionally mandated research projects, cooperative studies with other federal agencies and universities, USDA priority projects, and agency initiatives. Much of the current research portfolio of ERS is targeted towards issues of fundamental strategic importance--market performance, trade competitiveness, resource use and environmental problems, food safety, technology development and adoption, and economic conditions on farms and in rural communities.

For numerous reasons, ERS is better equipped and positioned to carry out comprehensive, objective, and timely research on many of these topics than are private consulting firms or universities. In any case, private consultants and university researchers almost always have to turn immediately to ERS for basic data and broad expertise about the topics they wish to investigate. Having a competent federal capacity to create needed data and carry out economic research on controversial subjects in food, agricultural, and the environment is vital in today's world.

Economic and Social Indicators

In this major program area, ERS produces and analyzes measurable indicators that describe the current status and the significant trends occurring in our food, agricultural, natural resource, and rural social systems. Examples include agricultural land values, earnings in rural areas, world trade in agricultural commodities, food consumption and expenditures, the incidence of non-metro poverty, and a host of others.

These data often come from special surveys and are simply not available elsewhere. This is unbiased, highly regarded information that provides Congress, the administration, and the public at large a window on the performance and behavior of significant sectors of the economy. These various indicators comprise much of what we know about the totality of U.S. agriculture, world food trade, and the rural economy.

Staff Analysis

Probably the fastest growing demand on ERS' professional resources is for quick-response staff analysis for administrative decision making on critical policy and program management issues affecting the entire Department. These requests span a wide range of topics and require a similarly wide spectrum of expertise and experience. The professional capital to respond quickly and accurately to these demands must be in place on a long-term basis. It cannot be added and subtracted overnight. And it must be grounded in solid, ongoing research and data gathering programs. Since 1985, requests to ERS for quick-response analyses have increased almost four-fold. Currently, they come down to ERS administrators at the rate of 2-3 per day.

Additional Considerations

In addition to its major programs, ERS occupies a very important, sometimes unnoticed, niche in the federal establishment. It is a major recruiting source of economic expertise and talent for numerous federal agencies. If one looks at the comings and goings of ERS staff members, it becomes clear that the training and experience of ERS economists are valued by agencies which need only one or a few applied staff economists. Much of the annual turnover in the ERS professional staff is because of opportunities that become available for them elsewhere in government. Successful ERS alumni are dotted all over the federal establishment. This valuable training and professional development function should not be ignored in considerations of ERS' future.

Closing Comments

It is my view that the budget cuts proposed for ERS have been developed without full knowledge, especially by the new USDA leadership and congressional members, of the nature and value of ERS' functions across a wide spectrum of concerns. It is likely that the new administration and others will soon learn to appreciate the unique and necessary role that ERS plays. Other administrations certainly have. However, if crippling budget cuts are applied, it will be very difficult and costly to rebuild the programs and the professional economic capacity that are now in place.

I very much appreciate opportunity to place my views on the record of this committee. Please let me know if I may provide additional information or clarify any points in this statement.

JPH

TESTIMONY OF

MR. WILLIAM C. ROWLAND, PRESIDENT,

THE OCEANIC INSTITUTE

BEFORE

THE SUBCOMMITTEE ON APPROPRIATIONS

ON

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES

April 1, 1993

Mr. Chairman, thank you for the opportunity to appear before you and for the Subcommittee's continued support of the development of the Center for Applied Aquaculture at the Oceanic Institute (OI) in Hawaii.

Owing to your efforts, the enhancement of OI's applied aquaculture research capabilities will put the United States in the forefront of marine and brackish water aquaculture development throughout the world for many years to come. However, due to unanticipated permitting and scheduling constraints, we are respectfully funds to complete the Center for Applied Aquaculture.

We believe that the growth of the U.S. aquaculture industry will be fostered by an enhanced national program of aquaculture research and development, the success of which will depend on the nation's leading freshwater and marine aquaculture research institutions.

These institutions must have the research and technical personnel, laboratory infrastructure, large-scale testing facilities, and education and training programs necessary to carry out an expanded and accelerated program of aquaculture research and development.

Thanks to your continued support of this concept, these services will be provided to marine and brackish water commercial aquaculture interests through the Center for Applied Aquaculture (CAA) at the Oceanic Institute in Hawaii.

Currently under construction, these new facilities will provide the nation's aquaculture industry with the capability to perform at a level which is expected in today's world of high technology.

The concept proposal for CAA, submitted to the Congress in March 1987, outlined the development of the Center. Through this Subcommittee, $6.125 million were appropriated and an additional $5 million was appropriated from the State of Hawaii. Since then, the private sector has contributed over $1 million to the project.

These funds have provided for comprehensive design, permitting, site work and construction and have also established a firm foundation for CAA, but has not allowed OI to complete the full implementation of the concept initially envisioned by the Subcommittee.

The original Development Plan, submitted in 1989, describes the Center operations, buildings, infrastructure and equipment. The proposed buildings and infrastructure in the Master Plan include a three-building administrative complex, a central services building with offices, storage and utilities, a laboratory/office building, ten research modules, a maintenance building, a saltwater supply, storage, distribution and disposal system, parking lots, roads and sidewalks.

OI is now seeking funding to complete the final increment of the Master Plan layout. Since 1990, the State of Hawaii has funded an additional $1.6 million in capital improvements. These improvements, a feed mill laboratory and an off-site quarantine facility, while contributing to CAA's range of services and research, have created additional demands at the Makapuu site.

In light of the above, the Master Plan calls for the following:

1. Two service and support buildings
2. A maintenance building
3. An expanded water system
4. Quarantine facilicies

One of the service and support buildings will be required to accompany the feed mill laboratory. A new and expanded maintenance building will be required as the newly constructed facility doubles the responsibilities of the maintenance department.

OI's need for sufficient quantity and quality of water has increased the demands of existing saltwater sources and the discharge system. A new and innovative discharge system holds the potential for not only increasing the quality of water discharged from OI, but also preparing the water for possible reuse through a site-wide recirculating system.

Locating a unit of the quarantine facility on the Big Island of Hawaii will further reduce risks of contaminating critical R&D

aquaculture stocks with pathological agents and will further strengthen Hawaii's position as a provider of High-health genetically improved animals for America's aquaculture producers.

These improvements will complete the investment already made and allow the Center for Applied Aquaculture to realize its fully intended potential as a world-class applied aquaculture research and training center.

In summary, we are requesting funding of $3.4 million in FY 1994 to complete the following facilities at the Center for Applied Aquaculture at the Oceanic Institute:

1. Service and support facility	=	$480,000
2. Maintenance facility	=	1,500,000
3. Water discharge system	=	410,000
4. Quarantine facility	=	620,000
5. Planning, design, management, permits	=	390,000
TOTAL		$3,400,000

Again, Mr. Chairman, we are grateful for the Subcommittee's support of the Center for Applied Aquaculture. We respectfully ask for your assistance in completing the project.

STATEMENT OF

FEDERATION OF AMERICAN SOCIETIES FOR FOOD ANIMAL SCIENCES

before the

HOUSE APPROPRIATIONS SUBCOMMITTEE

on the

FISCAL YEAR 1994 APPROPRIATIONS

Submitted by:

Robert G. Zimbelman, Ph.D.

Testimony to Subcommittee on Agricultural, Rural Development, Food and Drug Administration, and Related Agencies, Committee on Appropriations for the 1994 USDA Budget

We appreciate this opportunity to present to you our thoughts on the 1994 Budget. These comments are on behalf of the Federation of American Societies of Food Animal Sciences (FASFAS), a coalition of professional societies whose members do research, teaching and extension in animal agriculture. One purpose of FASFAS is to have a process for working out a single message from professional animal scientists to Congress on issues so as to minimize the time for communicating the need for animal agriculture research. One of the messages which we have received from Congress in recent times is that it should be inherent upon the scientific community to debate what the research priorities should be and those should then be shared with Congress. The rationale was that Congress was very busy and did not have the technical background to make decision about research priorities that some in the scientific community wanted them to make.

FASFAS took this message to heart and organized a workshop in October of 1992 called FAIR '95 (Food Animal Integrated Research for 1995) in order to respond to this congressional intent. However, FASFAS did not only involve the animal science community but also involved veterinarians, producers, processors and consumer advocacy groups. Especially invited were those from the areas of food safety, environment, and animal well-being. Recognizing further that support of research is not an entitlement but must be linked to societal benefits, the symposium workshop was organized based on those societal needs to which animal agriculture can relate. Our report, which will be issued in the next month, will be entitled **"Linking Science and Technology to Societal Benefits: Research Priorities for Competitive and Sustainable Food Production from Animals"**. The FAIR '95 process led to general agreement on the key features of future research. The attendees concurred that:

- integrated research approaches to scientific problem-solving will be necessary to improve competitiveness and sustainability of food and fiber production from animals;
- future success of food production from animals will depend on the ability of producers, processors, distributors and retailers to meet consumer expectations for safe, wholesome, nutritious, highly palatable, and affordable food;
- factors affecting world economic growth will drive the competitiveness and sustainability of U.S. food and fiber products from animals in an increasingly international market; and,
- a healthy environment and a stable ecosystem play a crucial role in sustaining economic growth and must be addressed by scientific research imperatives.

The FAIR '95 participants identified research goals and objectives that link key societal issues to science and technology advances that can come about through basic and interdisciplinary research of food production systems.

This research agenda, arrived at through consensus, will strengthen technological advances and technology transfer by government agencies, private industry, state universities and agricultural experiment stations. The new knowledge to be gained is expected to ensure that food and fiber products from animals will meet consumer needs and that the industry will remain competitive and sustainable.

Accomplishment of this research will benefit the American public by improving safety and nutritional quality of food products from animals, while ensuring competitiveness of U.S. food production from animals along with responsible animal and environmental well-being. In concert, these advances will enhance the quality of life for this and future generations.

The workshop identified 6 societal benefits, each of which is listed below in bold print. Each societal benefit has goals and objectives which will help implement that societal benefit.

ENHANCE INDUSTRY-WIDE RESPONSIVENESS TO CONSUMER AND SOCIETAL CONCERNS

GOAL 1: IDENTIFY AND QUANTIFY SOCIETAL CONCERNS ABOUT FOOD PRODUCTS FROM ANIMALS AND PRODUCTION SYSTEMS SO AS TO ENHANCE COMMUNICATION BETWEEN CONSUMERS AND THE FOOD INDUSTRY

Objective 1. Identify societal concerns that impact the marketplace through food choices.

Objective 2. Develop an improved understanding of the impacts of public policies on the U.S. food industry's competitiveness and sustainability in the global marketplace.

Objective 3. Improve communication techniques and information sharing.

MEET MARKET DEMANDS THROUGH INCREASED EFFICIENCY AND COMPETITIVENESS

GOAL 2: MEET CONSUMER NEEDS IN DOMESTIC AND INTERNATIONAL MARKETS FOR COMPETITIVE AND HIGH QUALITY FOOD PRODUCTS FROM ANIMALS.

Objective 1. Increase efficiencies of producing food from animals.

Objective 2. Enhance the quality of food products from animals.

Objective 3. Create value-based pricing and marketing systems for food and fiber products from animals.

CREATE INTEGRATED FOOD ANIMAL MANAGEMENT SYSTEMS

GOAL 3: DEVELOP INTEGRATED FOOD ANIMAL MANAGEMENT SYSTEMS AND ANIMAL HEALTH SYSTEMS WHICH SUPPORT EFFICIENT, COMPETITIVE AND SUSTAINABLE PRODUCTION OF SAFE AND WHOLESOME FOOD CONSISTENT WITH ANIMAL AND ENVIRONMENTAL WELL-BEING.

Objective 1. Integrate disciplinary research in order for producers to optimize biologic, environmental and economic efficiencies.

Objective 2. Develop research databases and integrate them into decision support systems for producers.

Objective 3. Enhance animal health, including the study of natural and acquired immunity and the interactions of genetics, nutrition and environment.

MAINTAIN AND ENHANCE ENVIRONMENTAL QUALITY

GOAL 4: IMPROVE THE EFFICIENCY OF RESOURCE USE TO MAINTAIN AND ENHANCE ENVIRONMENTAL QUALITY.

Objective 1. Create system models and collect baseline data needed for analysis of long-term interactions between food producing animals and environmental quality.

Objective 2. Develop economical methods that will improve utilization of animal production system by-products in an environmentally responsible manner.

FOOD QUALITY CONTROL IN TERMS OF SAFETY, DESIRABILITY AND NUTRITIONAL COMPOSITION

GOAL 5: IMPROVE INDUSTRY-WIDE QUALITY CONTROL SYSTEMS FOR FOOD PRODUCTS FROM ANIMALS.

Objective 1. Develop and verify economical, risk assessment-based inspection systems that evaluate food safety at critical control points throughout the food industry.

Objective 2. Adapt quality control systems to production, processing and marketing innovations intended to enhance the desirability of food products.

Objective 3. Identify human nutrition needs for specific consumer populations in relationship to the composition of food products from animals.

ENHANCE ANIMAL WELL-BEING THROUGHOUT THE LIFE CYCLE OF FOOD PRODUCING ANIMALS

GOAL 6: DEVELOP AND APPLY SCIENTIFIC MEASURES TO ASSESS ANIMAL WELL-BEING THROUGHOUT THE FOOD PRODUCTION CYCLE.

Objective 1. Determine scientific measures of well-being in food producing animals.

Objective 2. Develop long-term management options and short-term production practices based on scientific research findings about animal well-being.

These 6 Goals should represent a blueprint for funding of animal agriculture through federal funds, through state funds, and through various industry or commodity check-off funds. In particular, through federal funding we would hope that these 6 goals would impact Agricultural Research Service, Cooperative State Research Service and the Extension Service. Specifically for the National Research Initiative (NRI) we see relationships as reflected in the attached matrix.

We ask the Appropriations Committee to endorse the specific mention of these goals in the Requests For Proposal for future NRI Competitive Grants. We should point out that GOAL 3 relative to creation of Integrated Food Animal Management Systems represents a scientific implementation of Subtitle B: Sustainable Agriculture Research and Education of Public Law 101-624: Specifically Chapter 2. Integrated Management Systems; Section 1627 and Chapter 3. Sustainable Agricultural Technology Development and Transfer Program; Sections 1628 and 1629. We request that special consideration be given to implementing those programs through increased funding.

If additional information is needed on these requests, feel free to contact Robert G. Zimbelman, Ph.D., Executive Vice President, American Society of Animal Science who is liaison to FASFAS for this proposal. His phone is (301) 571-1875 and fax (301) 571-1837. We appreciate the consideration of the Appropriation Subcommittee to this request and hope that an appropriate reward to the animal agriculture community for going through this process of identifying priorities can be accorded by you to encourage us and other groups to continue in this manner.

Attachment: Matrix of FAIR '95 goals and National Research Initiative Competitive Grant Program (NRICGP) areas.

FAIR '95 Research Goals	Natural Resources and the Environment	Nutrition, Food Quality, and Health	Animal Systems	Plant Systems	Markets, Trade and Policy	Value Added and New Products
Consumer and Societal Concerns	+	+			++	
Efficiency and Competitiveness		+	++		+++	+
Integrated Management Systems	++	+	+++	+	+	
Environmental Quality	+++		+	+	+	
Food Safety, Quality and Nutrition		+++	++		+	+
Animal Well-Being			++		+	

Relationships are expressed by + in the matrix box, a greater number of + indicates greater relationship.

Colorado River Basin

Salinity Control Forum



Statement
of the
COLORADO RIVER BASIN SALINITY CONTROL FORUM

before the
HOUSE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD & DRUG ADMINISTRATION, AND RELATED AGENCIES

presented by
JACK A. BARNETT, EXECUTIVE DIRECTOR
March 22, 1993

GOVERNORS

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Pete Wilson, CA
Roy Romer, CO
Bob Miller, NV
Bruce King, NM
Mike Leavitt, UT
Mike Sullivan, WY

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D. Larry Anderson
Jay B. Pitkin

Wyoming

Gordon W. Fassett
William L. Garland
Dan S. Budd

EXECUTIVE DIRECTOR

Jack A. Barnett

106 West 500 South, Suite 101
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(801) 292-4663

Supporting funding for the Colorado River Salinity Control Program.

Total appropriation requested for USDA Onfarm Colorado River Salinity Control	$18,400,000

In Fiscal Year 1993 the Congress provided $13.78 million for efforts under the Department of Agriculture Colorado River Salinity Control Program. Studies by the Department of Agriculture and the Colorado River Basin Salinity Control Forum conclude that $18,400,000 is needed in FY 94.

There is strong interest and active participation by farmers in the five areas where the program has been initiated. Even a stronger commitment by farmers to implement salinity control measures in the future is demonstrated by the large number of pending applications for participation. Irrigators in the Uinta Basin area of Utah, the Big Sandy River area of Wyoming, and the Grand Valley, McElmo Creek, and Lower Gunnison areas of Colorado stand ready to pay their requested share of the cost of this water quality control program, with benefits being felt hundreds of miles downstream in the United States and Mexico. In addition, the Department of Agriculture is ready to implement the Colorado River Salinity Control Program in the Moapa Valley area of Nevada.

DETAILS CONCERNING FUND ALLOCATION

The onfarm Salinity Control Program was initiated in the 1970's in the Grand Valley of Colorado and the Uinta Basin area of Utah with the use of Agricultural Conservation Program funds. With the enactment of legislation in 1984, a Colorado River salinity control program and funding line item were established and the program is now being implemented in these five geographic areas. Within all five areas, many contracts have been signed and many more contracts are being prepared. By the end of the current fiscal year, it is anticipated that all of the FY 93 funds will be designated for contracts and technical assistance. FY 93 funds will be totally committed while many additional basin farmers are ready to cost share and participate.

Two additional areas have been identified in Utah and Nevada as having very cost-effective salinity control onfarm program potential, and they are included within the overall plan of implementation approved by the Forum, the Basin states, and EPA. It is planned that the next onfarm salinity control effort will be in the Moapa Valley of Nevada, and this effort could begin this next fiscal year. Under study is the Price-San Rafael area of Utah. These much-needed water quality programs can only move ahead with adequate Federal funding. The Basin states and the local farmers have funds ready to proceed with this partnership and pay at least 51 percent of the cost of the onfarm construction program.

Joint studies, in part required under the Clean Water Act, conducted by several federal agencies and the seven Colorado River Basin States have determined the amount of salt which must be removed to continue to assure compliance with water quality standards. Jointly adopted plans identify the role of various agencies of government to remove the needed amount of salt. The role of the Department of Agriculture is most important, and the funding in FY 94 for this program is essential.

JUSTIFICATION

The water of the Colorado River provides municipal and industrial water for 18 million people and irrigation water for 1.7 million acres in parts of the seven Colorado River Basin states. The River also provides domestic and irrigation water to Mexico. Salinity has long been recognized as one of the major problems in the River. Water users in the lower reaches of the River system have suffered significant adverse impacts due to the River's salinity. These impacts have been estimated to have exceed $300 million a year to United States water users. Without the salinity control measures, the salinity of the River is projected to increase beyond the water quality numeric criteria, with continued development of the compact-apportioned waters. Without the necessary salinity control measures, the economic damages suffered by the water users could double by the turn of the century.

The Basin states' concern with the River's increasing salinity led them to create the Colorado River Basin Salinity Control Forum in 1973. The Forum, whose members are appointed by the governors of the respective states, developed a salinity control policy that stated that while the Basin states continue to develop their compact- apportioned waters, salinity concentrations must be maintained at or below those levels found in the lower River in 1972.

This salinity control objective is the Basin states' adopted, EPA-approved water quality standard for the Colorado River. The standard was adopted pursuant to the Clean Water Act. The policy forms the basis for the cooperative federal/state, Basin-wide salinity control plan. The Forum has a continuing responsibility to see that a salinity control plan is implemented to meet the policy objectives.

After discussions involving the Federal Government, the Republic of Mexico, and the seven Colorado River Basin states, the Congress enacted in 1974 the Forum-sponsored Colorado River Basin Salinity Control Act (P.L. 93-320). Title I of the Act established a program to reduce the salt concentrations below Imperial Dam (the last diversion point on the Colorado River in the United States), so that the United States could honor its 1973 agreement on Colorado River salinity with Mexico. Title I was identified by Congress as a federal commitment. The Act established a program, Title II, which directed the States and the Federal Government to work together to prevent salinity increases in the Colorado River above Imperial Dam, benefitting users in the United States as well as Mexico. The 1974 Act also created a Colorado River Basin Salinity Control Advisory Council, composed of gubernatorial representatives of the Basin states, to advise the Secretaries of the Interior and Agriculture and the Administrator of the Environmental Protection Agency as to needed annual adjustments to the salinity control effort. The appropriations recommended in this testimony by the Forum are in accordance with the Advisory Council's written recommendations to these federal officials.

In 1984 the Congress enacted much-needed amendments to the 1974 Act in response to issues first raised by the Forum. The amendments resulted in Public Law 98-569, which authorized additional Department of the Interior and Department of Agriculture activities needed to meet the objectives. In recognition of the proven cost-effectiveness of Agriculture's onfarm management activities in controlling the river's salinity, a separate Colorado River Basin onfarm management salinity control program was authorized for the Department of Agriculture.

Should necessary funding levels in Fiscal Year 94 and future years not be provided for the Colorado River Salinity Control Program, the probability of the water quality numeric criteria being exceeded in the future is greatly increased. Further, less than adequate funding today will unquestionably result in significantly higher future costs to implement the same level of salinity control. The Forum urges that due consideration be given to these factors as the Committee recommends the FY 94 funding level for this program.

Jack A. Barnett
Executive Director

TESTIMONY BEFORE THE HOUSE APPROPRIATIONS
SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE,
AND RELATED AGENCIES
APRIL 1, 1993
5:00 P.M.
RAYBURN OFFICE BLDG, ROOM 2362
SUBMITTED BY T. S. SHULER
PRESIDENT, DELTA COUNCIL

Chairman Durbin and members of the Committee:

My name is T.S. Shuler and I currently serve as President of Delta Council, an area economic development organization representing Northwest Mississippi, where more than $2 billion of agriculture production occurs annually. Also, it is in the Delta Council area that the world-renowned Stoneville Research Center, serving the entire mid-south United States, is located on more than 2000 acres of experimental research land which has been purchased by farmers and deeded to the Land Grant University System and USDA for experimental plots. At no other agriculture research location in the world are there more applied sciences being practiced at one center.

We would like to express our gratitude to the appropriations committee for it's long standing support of public-sector research initiated by the land grant system and the USDA. Had it not been for the strong resolve and support demonstrated by this committee during the past decade, the technology which has made U.S. Agriculture the envy of every other industry in the nation and around the globe, would have suffered dramatically due to proposed budget cuts. It is especially important to midsouth agriculture that your committee continue to uphold this level of commitment so that continued gains can be registered in production efficiency, cost efficiency, and world-price competitiveness. In three of our major crops grown in the Mississippi Delta area we have experienced unprecedented increases in production capabilities, as indicated by Table 1 (see attached). It should be noted that these gains in production values outlined in Table 1 have been accomplished through increased yields and at a time when acres have not been expanded dramatically in any of the crops, except catfish. The price of all three major Delta commodities of cotton, rice, and catfish have remained low during this time, also.

The value of agriculture production in our region, and it's terrific impact on all allied agricultural businesses in the further-processing, marketing, distribution, and transportation chain is the greatest testimony to true rural development. It should be recognized that if it was not for the support of this appropriations committee, this tried and proven rural development stimulus would not have been possible.

In the interest of brevity, we would like to request that the committee carefully examine the enclosed attachment of appropriations initiatives that have been supported by this committee in the past and we respectfully request your continued support for them. We appreciate the opportunity to enroll our testimony as part of the appropriations process.

Respectfully submitted,

T.S. Shuler
President, Delta Council

DELTA COUNCIL
APPROPRIATIONS PRIORITIES - FY 1994

AGRICULTURE

A. Agriculture Research Service

	FY'93	FY'94 (request)
Soybean Research	525K	525K
NW Aquaculture Center		
Operations	500K	1.0M
Construction	930K	2.5M
Water Quality	(language)	(same as '93)

B. Cooperative States Research Service

	FY'93	FY'94 (request)
Aquaculture	700K	700K
Rural Revitalization	175K	175K
MVSU	688K	688K

C. Extension Service

	FY'93	FY'94
Crop Simulation	498K	498K

D. APHIS

	FY'93	FY'94
Boll Weevil	455K	455K

E. Soil Conservation Service

	FY'93	FY'94
Delta Study	100K	800K
Deer Creek	200K	200K

UPPER COLORADO
RIVER COMMISSION

355 South Fourth East Street • Salt Lake City • Utah 84111 • 801-531-1150 • FAX 801-531-9705

March 25, 1993

Congressman Richard J. Durbin, Chairman
Subcommittee on Agriculture, FDA,
Rural Development and Related Agencies
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Durbin:

The Upper Colorado River Commission wishes to support the Colorado River Basin Salinity Control Forum in requesting appropriations of $18,400,000 for USDA activities in salinity control matters. Enclosed is a statement by the Upper Colorado River Commission concerning this matter.

We would appreciate your making this statement a part of the formal hearing record concerning Fiscal Year 1994 appropriations for the Department of Agriculture. We thank you for your support of this critically important program in the past and trust you will again support funding to accelerate the accomplishment of this program.

Sincerely,

Wayne E. Cook
Executive Director

WEC:pj

Enc

STATEMENT OF WAYNE E. COOK, EXECUTIVE DIRECTOR
UPPER COLORADO RIVER COMMISSION
to the
SUBCOMMITTEE ON RURAL DEVELOPMENT, AGRICULTURE, FDA AND RELATED AGENCIES
of the
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

March 25, 1993

Summary of Specific Action Requested

Request that funds for the Colorado River Basin Salinity Control Program in the amount of $18,400,000 be appropriated for Fiscal Year 1994 program for the United States Department of Agriculture onfarm Colorado River Basin Salinity Program.

Mr. Chairman, the Upper Colorado River Commission is an interstate compact administrative agency created by the Upper Colorado River Basin Compact of 1948. The member States of the Upper Colorado River Commission are: Colorado, New Mexico, Utah and Wyoming. Since its inception, the Commission has actively participated in the development, utilization and conservation of the water resources of the Colorado River Basin.

The member States of the Upper Colorado River Commission have always given strong support to water resources development and salinity control measures in the Upper Colorado River Basin and are deeply committed to the Colorado River Salinity Control Program. We who are interested in water resources development and salinity control in the Basin appreciate the opportunity to provide testimony before this subcommittee in support of the appropriation of funds to continue the USDA Soil Conservation Service Program of onfarm salinity control. The Commission supports broad-range appropriations to accomplish salinity control programs in both the Department of the Interior and the Department of Agriculture. The purpose of these programs is to maintain salinity levels in the Colorado River system within established numeric criteria while the Basin States continue to develop their Compact appropriationed waters.

Specifically, the Upper Colorado River Commission requests Department of Agriculture funding for the development and implementation of the Soil Conservation Service's onfarm management activities in controlling river salinity in the Colorado River Basin as authorized by PL 98-569.

In Fiscal Year 1992 Congress provided $14,780,000 for work under the Department of Agriculture Colorado River Salinity Control Program. Congress also provided $13,783,000 million in Fiscal Year 1993. Studies by the Department of Agriculture and the Colorado River Basin Salinity Control Forum for the 1992 Advisory Council report identify that $18,400,000 is needed in Fiscal Year 1994; $22,200,000 is needed in Fiscal Year 1995; and $26,900,000 is needed in Fiscal Year 1996 if water quality standards are to be maintained in the Colorado River.

There is strong interest and active participation by farmers in the five areas where the program has been initiated. An even stronger commitment by farmers to implement salinity control measures in the future is demonstrated by the large number of pending applications for participation. Irrigators in the Uinta Basin area of Utah, the Big Sandy area of Wyoming and the Grand Valley, McElmo Creek and Lower Gunnison areas of Colorado stand ready to pay their requested share of the cost of this water quality control program, with benefits being felt throughout the hundreds of miles downstream in the United States and Mexico. In addition, the Department of Agriculture is proceeding with actions to implement the Colorado River Salinity Control Program in the Moapa Valley area of Nevada.

Three additional areas have been identified in Utah and Nevada as having very cost-effective salinity control onfarm program potential, and they are included within the overall USDA selected plan. The next onfarm salinity control efforts could begin in the Moapa Valley area of Nevada. The Price-San Rafael area of Utah is under study. These much-needed water quality programs can only move ahead with adequate Federal funding. The Basin States and the local farmers have funds ready to proceed with this partnership and pay at least 51 percent of the cost of this construction program.

Joint studies, in part required under the Clean Water Act, conducted by several Federal agencies and the seven Colorado River Basin States, have determined the amount of salt that must be removed to meet water quality standards. Jointly adopted plans identify the role of various agencies of government to remove the needed amount of salt. The role of the Department of Agriculture is most important, and funding in Fiscal Year 1994 for this program in amounts less than $18,400,000 would greatly increase the probability of water quality numeric criteria associated with the State-adopted and EPA-approved standard being met.

Should the necessary funding levels in Fiscal Year 1994 and future years not be provided for the Colorado River Salinity Control Program, the probability of water quality numeric criteria being exceeded is greatly increased. Furthermore, less than adequate funding today will unquestionably result in significantly higher future costs to implement the same level of salinity control. The Upper Colorado River Commission urges that due consideration be given to these factors as the Committee recommends the Fiscal Year 1994 funding level for this program.

Further details regarding the specific justification for the salinity program will be presented in the testimony of the Executive Director of the Colorado River Basin Salinity Control Forum as well as by representatives of the Colorado River Basin States.

Mr. Chairman, on behalf of the Upper Colorado River Commission, thank you for providing the Commission an opportunity to present this statement for the Subcommittee's consideration.

Wayne E. Cook
Executive Director

CARGILL

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March 25, 1993

Honorable Richard Durbin
Chairman, Subcommittee on Agriculture
House Appropriations Committee
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Durbin:

I understand the subject of USDA/FSIS's zero-tolerance standard for feces, ingesta and milk on beef carcasses was discussed in the Ag Appropriations hearing last week. I am told that the subject of Cargill/Excel communications with FSIS was also brought up.

The purpose of this note is to clarify that at no time prior to FSIS's decision to rescind a memo on zero-tolerance, issued by the area supervisor in Topka, did anyone from Cargill or Excel meet with or discuss the memo with FSIS officials.

Contrary to claims made by the Government Accountability Project, an Excel official spoke with FSIS Administror Russell Cross only after the memo had been rescinded. The Seattle Times, the Kansas City Star, and the Associated Press have all issued corrections of their misreported information which had been furnished by GAP.

We respectfully request that this letter be included as a part of the committee hearing record.

If there is any additional information we can furnish you on this subject, we would be pleased to provide it.

Sincerely,

Greg Page
President, North American Beef

GRP:skj

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Natural Resources Defense Council

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TESTIMONY OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) BEFORE THE HOUSE AGRICULTURE APPROPRIATIONS SUBCOMMITTEE REGARDING FUNDING FOR APHIS TO EXCLUDE NOXIOUS WEEDS AND PLANT PESTS

Submitted by Faith T. Campbell

21 April, 1993

The Natural Resources Defense Council (NRDC) appreciates this opportunity to outline to the Congress an insufficiently understood threat to agricultural productivity and biological conservation and our suggested steps toward a solution.

Ecologists recognize invasions by alien or non-indigenous plants (also called "noxious weeds") as threatening entire ecosystems throughout the country. Furthermore, the cost of weed control and crop losses to weeds in agriculture now exceeds $20 billion per year.

Timber revenues lost to tree death or reduced growth caused by alien pests have been in the range of $2 billion. Other costs include efforts to control the pests once they have entered the country. The U.S. Forest Service (USFS) is spending $12.5 million on research and management of alien pests in FY93. The USFS and Animal and Plant Health Inspection Service (APHIS) together spent $7.6 million in FY92 trying to eradicate the newly introduced Asian gypsy moth.

Quarantines and other exclusion programs -- programs which are the responsibility of APHIS -- are the first line of defense in protecting agriculture and natural ecosystems from the damage caused by introduced organisms. Exclusion delays introductions, thus defering damage and allowing science to develop more effective counter-measures. The late Yale professor, Dr. John Boyce, considered quarantines particularly essential to forestry because of the long period before trees reach maturity, a fact which slows development of disease-resistant strains.

In order to enable APHIS to improve its exclusion programs and to respond more rapidly to newly discovered outbreaks of noxious weeds, NRDC has joined with the Weed Science Society of America (WSSA) and Natural Areas Association (NAA) to ask for amendments to the Federal Noxious Weed Act [7 U.S.C. §§ 2801 - 2813]. In the meantime, we ask that you increase appropriations for implementation of the Federal Noxious Weed Act from the FY93 level of $289,000 to $5 million.

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Furthermore, to improve efforts to exclude pests threatening the health and productivity of our forests, we request a $1.5 million increase in APHIS' Agricultural Quarantine Inspection program. This funding should be earmarked for three country-specific risk assessments to determine which forest pests might be introduced with imports of logs and other unprocessed wood products.

Background

Noxious weeds

Invasions by non-indigenous plants (or noxious weeds) threaten to overwhelm widespread regions throughout the United States. Hawai'i and similarly isolated ecosystems are the most vulnerable to invasions by alien species, but rangelands, forests, wetlands, National parks, and wilderness areas in New England, Florida, the Intermountain West and Northern Rocky Mountains are also heavily impacted. Alien or exotic plant species that better tolerate disturbance are able to take advantage of past or present clearing of forests, plowing, livestock grazing, and altered fire patterns. The problem has been exacerbated by deliberate or accidental introductions of the alien plant species.

The cost of controlling alien plants invading 109 National parks will be $46 million. In the West, "noxious weeds" infest over 5.6 million acres of rangeland in Oregon alone; the affected area grows by 2,000 acres per day. The Bureau of Land Management predicts that, if control efforts are not increased, up to 20 million additional acres will be infested by noxious weeds by the year 2000. This represents 24% of BLM lands outside Alaska.

Among alien or exotic plants threatening natural ecosystems are several bindweeds of the *Polygonum* genus, including Japanese knotweed or Japanese bamboo *Polygonum cuspidatum* and Mile-a-minute weed *Polygonum perfoliatum*; tree of heaven *Allanthus altissima*; Canada thistle *Cirsium arvense*; musk thistle *Cardaria nutans*; yellow starthistle *Centaurea solstitialis*; multi-flora rose *Rosa multiflora*; purple loosestrife *Lythrum salicaria*; *Hydrilla verticillata*; common crupina *Crupina vulgaris*; the knapweeds -- diffuse *Centaurea diffusa*, spotted *C. maculosa*, Russian *C. repens*; leafy spurge *Euphorbia esula*; and salt ceder or tamarisk, *Tamarix*.

Site-specific control programs carried out by land managers are vitally important. However, they are also costly, piecemeal, and ultimately futile in the absence of an effective national program intended to exclude new harmful introductions; eradicate new infestations; prevent the spread of established species to additional parts of the country; and contain or (eventually) eradicate widespread species which are destroying plant communities and entire ecosystems. APHIS currently lacks adequate resources to carry out its principal responsibilities of excluding foreign weeds and containing incipient infestations before they spread. Our proposed increase would help to close this gap.

The Threat to Our Forests

In a continuing study, the U.S. Forest Service has identified 20 exotic tree diseases and over 160 exotic insect pests of trees in the United States. According to USFS scientist Dr. F. Thomas Ledig, American chestnut, American elm, sugar pine, eastern white pine, western white pine, Port-Orford-cedar, and Florida Torreya have been "eliminated by introduced diseases or [are] threatened with extinction". Chestnut, the pines, and Port-Orford-cedar were all valuable timber species. Another valuable timber species, butternut, and Fraser fir (grown for Christmas trees) are candidates for listing under the Endangered Species Act because of the impact of an introduced disease or insect.

Potential losses are far higher. Two USFS/APHIS teams have estimated timber losses associated with the possible introduction of just a few of the many forest pests in Siberia and New Zealand at between $77 million and $58.3 billion. These estimates do not include costs associated with loss of jobs, recreational amenities, or ecological values. According to Boyce, the "father" of American forest pathology, "Diseases caused by introduced fungi are potentially a menace to every one of our commercially important timber species."

The recent discovery of three pests which slipped past existing controls[1] and interest in importing large quantities of logs from Siberia, New Zealand, and Chile have spurred APHIS to begin developing general phytosanitary regulations which would govern "unprocessed wood" products (see 57 Federal Register, No. 184, pp. 43628-43631). NRDC supports this long-overdue action. However, promulgation and implementation of more stringent controls on log imports will require additional staff and funds at APHIS.

Nor is stringent regulation of timber imports sufficient to protect our forest resources. At least five pests of native tree species were introduced on nursery stock; these include the chestnut blight and white pine blister rust, two of the most devastating of all the introductions. At least two other pests were dispersed within North America on nursery material. APHIS must improve its quarantine program to prevent new introductions.

To ensure the continued productivity of American agriculture, production forests, and natural ecosystems, we ask that the Agriculture Appropriations Subcommittee provide the requested increases to APHIS, which total $6.5 million.

[1]Asian gypsy moth; European bark beetle *Tomicus biniperda*, and *Melampsora larici-populina* rust on poplar and larch.

Wildlife Management Institute

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Statement of
Donald F. McKenzie, Resource Associate
before the
House Committee on Appropriations
Subcommittee on Rural Development, Agriculture and Related Agencies
on
FY 1994 Appropriations for the U.S. Department of Agriculture

April 23, 1993

Mr. Chairman:

The Wildlife Management Institute (WMI) appreciates this opportunity to present testimony regarding Fiscal Year (FY) 1994 appropriations for agencies and programs of the U.S. Department of Agriculture (USDA). WMI is a private, nonprofit scientific and educational organization, staffed by professional natural resource managers, that has been dedicated to the restoration and sound management of wildlife and other natural resources since 1911.

WMI's interest in agricultural appropriations stems from the reality that the best opportunity for effectively restoring and perpetuating wildlife resources of this country lies in working cooperatively with landowners on private land. Agencies and programs of USDA have more impact on natural resources than those of any other government entity. The last two farm bills have provided powerful tools for USDA to restore and benefit numerous natural resources.

Farm Service Agency

WMI's basic position on the reorganization of USDA, as outlined in the Administration's budget request for the new Farm Service Agency (FSA), is that an effective and accountable conservation delivery mechanism is imperative if USDA is to achieve the conservation goals established in the 1985 Food Security Act and the 1990 Food, Agriculture, Conservation and Trade (FACT) Act. USDA's new conservation responsibilities under these acts cannot be implemented without sufficient qualified technical staff at the field level, to provide needed technical support as well as compliance monitoring.

Since it is impossible to determine what specific impacts the proposed budget for the FSA will have on the delivery mechanism for conservation technical assistance, we can only offer a broad recommendation. **WMI recommends that the proposed 23 percent reduction in FSA staff years and the proposed 26 percent reduction in county office staff years be achieved without reducing existing USDA field-level conservation technical capabilities.**

Wetlands Reserve Program (WRP)

In WMI's opinion, the WRP is possibly the most beneficial and cost-effective conservation program ever devised. It is a *voluntary* program that provides incentive and just compensation for landowners to restore and protect wetlands, while allowing landowners to retain title to as well as some economic uses of the restored wetlands.

The WRP has proven to be popular among farmers and conservationists, alike. The demand for the WRP by farmers during the pilot signup in 1992 exceeded the enrollment cap by about 9:1. Farmers are enthusiastically anticipating additional signups in many other states.

The WRP is the best tool available to begin the long-term reversal of the decades-old trend of declining wetlands acreage. The WRP ensures the maximum public conservation benefits from federal taxpayer dollars invested by: (1) requiring that sound restoration and conservation plans be implemented on the lands accepted, (2) requiring perpetual easements on the land enrolled by the willing landowners, and (3) retiring surplus marginal croplands.

The WRP also represents a test of the feasibility of the agriculture community's desire for environmental incentives rather than requirements. If incentive programs are not funded, society's environmental goals will not be met.

WMI recommends that the Appropriations Committee meet the Administration's request for $370.3 million to enroll 450,000 acres in the WRP in FY 1994. We also enthusiastically support the intention to meet the one million-acre enrollment goal by the end of 1995.

Conservation Reserve Program (CRP)

WMI supports the Administration's stated objective of meeting the CRP enrollment goal of 39 million acres by the end of 1995. The CRP has met and exceeded all its objectives, including reduction of soil erosion and sedimentation, reduction of surplus cropland, and restoration of habitats for wildlife and fish. **WMI recommends the Appropriations Committee support the Administration's request for $1.827 billion to fund existing contracts plus a one million-acre CRP signup in 1994.**

Watershed and Flood Prevention Operations

WMI notes and appreciates that the Administration intends for this program to emphasize non-structural land treatment measures that minimize the number of construction projects and increase the local cost-share portion for planning and operations. However, recent actions of the Soil Conservation Service in anticipation of passage of the Administration's economic stimulus package demonstrate that the agency's intentions regarding structural remedies differ from those of the Administration. As a result, WMI is concerned that existing authorized, but obsolete, projects that rely heavily on structural measures such as channelization and multiple dams will continue to be a high priority of project proponents.

WMI recommends that the proposed FY 1994 funding level of $150 million for Watershed and Flood Prevention Operations be *reduced*, to the FY 1992 appropriation level of $114 million. In addition, we recommend that 25 percent of appropriated funds be *earmarked* for non-structural land treatment measures.

Extension Service

WMI notes that the Administration requested $270 million for the Smith-Lever 3(b&c) Formula program for FY 1994, a 2.7 percent increase above FY 1993 funding. This increase will begin to improve the balance of Extension's base and targeted programs.

However, the Cooperative Extension Service has an unfunded commitment to establish and improve environmental stewardship education programs. WMI would like to encourage close cooperation between Extension and federal and state natural resource agencies. Without a commitment of appropriate funding to support this program, it is unlikely that states will divert already targeted 3(b&c) funds to ensure the needed growth and effectiveness of the education programs.

WMI recommends that the FY 1994 funds be increased 4 percent above FY 1993, to a level of $273.2 million, *provided that* not less than 35 percent of the increase will be applied to environmental stewardship education programs.

Animal and Plant Health Inspection Service, Animal Damage Control (APHIS-ADC)

APHIS-ADC is responsible for developing and implementing methods of controlling wildlife damage to agriculture, aquaculture, forests and other resources. The agency also is responsible for protecting the public health and safety by preventing animal collisions with airplanes at airports.

APHIS-ADC's control activities are cooperatively funded through state and county governments and private producers, and generally are integrated within broad wildlife management programs. An explanation of this integration, as well as the environmental impacts of these programs, is described in the recently released "Animal Damage Control Program--Supplement to the Draft Environmental Impact Statement." While this document clearly identifies the national scope of the APHIS-ADC program, it does not yet address local impacts. **WMI recommends that the current funding level of $26.2 million for APHIS-ADC Operations be increased by $1.5 million to enable the agency to complete the site-specific Environmental Impact Statements necessary to clearly understand the impacts of the program on a local scale.**

General public agreement exists that, in some situations, animals do cause problems that need to be addressed. However, considerable controversy surrounds the methods used by APHIS-ADC to resolve some animal damage problems. **WMI recommends that the current appropriation level of $9.5 million for APHIS-ADC Method Development be increased by $5 million to develop socially acceptable and environmentally safe alternative technologies to resolve animal damage conflicts.**

APHIS-ADC's research facility, located in the Denver Wildlife Research Center, has become ill-suited to conduct the research needed to develop solutions to current and future problems associated with wildlife damage management. APHIS-ADC already has committed $8.5 million to relocate this facility to Colorado State University in Fort Collins. However, before this move can be accommodated, a five-year commitment of an additional $30 million is needed. **WMI recommends that this commitment be made in this budget cycle by directing that $6 million of the existing APHIS Building and Construction Funds be allocated for each of the next five years to construct the new facility.**

Mr. Chairman, WMI appreciates the opportunity to present this testimony for your consideration.



American Federation of
Government Employees, AFL-CIO

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STATEMENT BY

JOHN N. STURDIVANT
NATIONAL PRESIDENT

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES
AFL-CIO

BEFORE THE

THE SUBCOMMITTEE ON AGRICULTURE

HOUSE COMMITTEE ON APPROPRIATIONS

ON

FISCAL YEAR 1994 APPROPRIATIONS

APRIL 20, 1993

My name is John Sturdivant, and I am the National President of the American Federation of Government Employees, AFL-CIO. On behalf of the over 700,000 federal workers our union represents, I am happy to have the opportunity to present our views on priorities for the FY 1994 appropriations for the Department of Agriculture.

AFGE represents workers throughout the USDA, from the Farmers Home Administration to the Agricultural Research Service to the Food Safety and Inspection Service. I will focus my comments on the issue of food inspection, as it is of great concern to our members and the nation at large.

In the wake of the tragedies in the Pacific Northwest, President Clinton's budget authorized hiring 160 additional meat inspectors. This would be good news, except for the fact that there are currently 525 positions which are vacant. With a shortage of approximately 365 inspectors, it is impossible for the Food Safety and Inspection Service to provide effective consumer protection. It is urgent that the food inspection service be fully staffed, if we are even to begin to assure a safe food supply.

In addition to problems of insufficient staffing, food inspectors are hampered in their efforts to provide adequate inspections due to the deficiencies of the present "performance-based" inspection system for meat processing. The system is heavily biased toward the interests of private industry.

For example, once a deficiency is found, a firm is given too long a period of time to make corrections. The inspector is forced to use the deficiency classification guide to evaluate and determine the severity of the deficiency, and once this is determined, the firm is allowed to keep operating under unsafe or unsanitary conditions. AFGE believes that it is of utmost importance, for the integrity of the USDA and the safety of the food supply, that inspectors once again be given the authority to take corrective action on the spot when a deficiency is found.

The current system is inefficient and circuitous: once a deficiency is found, two subsequent phases of inspections by two separate layers of supervisory personnel are required before corrective action is taken. The time this takes allows unsafe conditions to prevail for excessive lengths of time. As a result, many inspectors have lost faith in the integrity of the system.

We believe that the situation described above is a result of the fact that the industries regulated by the USDA have an excessive degree of influence over decisions concerning food safety and inspection. In other words, we are dangerously close to a situation where "the fox is guarding the henhouse."

AFGE also urges you to consider evaluating the cost-effectiveness of the current location of the food safety and inspection training center at Texas A & M University in College Station, Texas. We consider the decision to locate the training center at College Station

to be more political than practical. The site is difficult and expensive to reach via any type of public transportation, especially by air. We believe that some of the $2.6 million a year could be saved if the training center were based at a more accessible location.

USDA food inspectors do not oppose change, as long as change means improvement. We support any objective changes which improve the efficiency and effectiveness of food safety inspection. In recent years, however, changes which were billed as efforts to increase efficiency actually had the opposite result. The meat and poultry industries were big beneficiaries at the expense of the consuming public.

An example of fraudulent "efficiencies" is the Streamlined Inspection System for cattle slaughter. The agency promoted the process in five pilot programs. The centerpiece of the program was a reduction in the number of inspectors per plant, from eleven to eight inspectors per shift. The plant operated two shifts, which allowed the Food Safety Inspection Service to eliminate six inspectors. At the same time, the line speed was increased from 325 carcasses an hour to approximately 400 per hour.

The result was an **apparent** increase in efficiency whose only beneficiary was the plant: more meat was inspected at a faster rate. Fortunately for the meat-consuming public, Congress terminated funding of the Streamlined Inspection System. We urge you, therefore, to take great caution in approving further efficiency improvements which speed up inspections at the expense of the integrity of the food inspection service and the safety of the public.



AMERICAN FARM BUREAU FEDERATION

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April 23, 1993

The Honorable Richard Durbin
Chairman
House Appropriations Subcommittee on Agriculture,
Rural Development, Food and Drug Administration and
Related Agencies
Room 2362
Rayburn House Office Building
Washington, DC 20515

Dear Chairman Durbin:

Enclosed are the American Farm Bureau Federation's comments regarding the FY 1994 U.S. Department of Agriculture budget. Please include our statement in the hearing record.

We appreciate your consideration of our views.

Sincerely,

Richard W. Newpher
Executive Director
Washington Office

RWN/lh
Enclosure
cc: Subcommittee Members

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STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION TO THE SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES OF THE HOUSE APPROPRIATIONS COMMITTEE REGARDING THE FY 1994 U.S. DEPARTMENT OF AGRICULTURE BUDGET

April 23, 1993

The American Farm Bureau Federation is the nation's largest general farm organization with a membership of over 4 million member families in 50 states and Puerto Rico. Farm Bureau members produce virtually every type of commodity grown commercially in this country. Our policy is developed by producer members at the county, state and national levels of the organization.

We are extremely concerned that commodity programs have been targeted for excessive spending cuts in the FY 1994 budget. These cuts must be considered in the context of what has occurred in the budget for commodity programs since 1986. Spending on farm programs has been reduced by more than 50 percent since 1986. In every budget-cutting exercise since that time, agricultural spending has been reduced by more than the rate of reduction applied to other programs. For example, in the 1990 Budget Reconciliation Act, agricultural spending was cut by over 20 percent, a greater percentage than any other program. Agriculture has been willing to do its share to reduce the deficit, but the cuts that have been imposed as well as those proposed are clearly disproportionate.

Many of the program changes necessary to achieve the president's deficit reduction plans do not fall within the purview of the Appropriations Committee, but we believe it is important for you to be aware of our position.

In President Clinton's proposal, agricultural programs are once again targeted for cuts that will exceed the rate of spending reduction for the entire budget. The large cuts called for by President Clinton, which would be fully effective in FY 1996-98, would cause farm program spending to be 25 percent less per year than would occur under current law. We find neither the equity nor fairness in this distribution of the burden for reduced spending.

The specific budget cuts proposed by the president are troubling to us. AFBF believes that the cuts would prove to be detrimental to our ability to compete in world markets. Other proposed cuts would cripple program provisions that have been both constructive and cost-effective, and some of the proposed cuts simply will not achieve the proposed savings that have been attributed them. The following points are some of our objections to specific budget cuts:

(1) $100,000 Off-Farm Income Test: Farm Bureau supports the current program payment procedures and opposes any action that would further target

program benefits. We believe that unwise targeting of program benefits will be detrimental to the current production and marketing infrastructure. We believe that agricultural programs will be less effective if arbitrary limits on eligibility are adopted. People will find ways to circumvent the restrictions and those who are made ineligible will produce in competition with the program, thus increasing the burden of supply adjustment on the farmers who remain under the program restriction. In addition, we believe the following points should be considered:

(a) Precedent: If such a means test were imposed, we are concerned that the limits placed on program participation would be expanded over time, ultimately rendering these programs totally ineffective;

(b) Enforcement: If this means test were in place, all farmers participating in the program would be required to prove that they do not exceed the off-farm income cap. This would require an overwhelming amount of documentation such as tax returns and bank statements which would severely strain the already overloaded ASCS system;

(c) Economic: Farmers, operators and landlords who share rent property to farmers are eligible for farm program benefits. Excluding participants will lead to restructuring of business relationships such as changing rental agreements from share lease to cash rent contracts. This will place a greater burden and much greater risk on the farm operator. Banks and other financial institutions are reluctant to finance operators who cash rent. Not only will it be more difficult for farmers to finance production costs, but it will greatly limit the cost savings expected from this proposal--if not eliminate it entirely.

(2) Increasing Flex Acreage: We believe that this is a very ominous budget cut which will come directly out of farm income and will further weaken the economic condition of many farmers and farm communities. As the unpaid acreage increases, more farmers will find the program to be lacking in sufficient benefits compared to the cost of setting aside acreage and complying with the conservation provisions of the farm bill. This could severely reduce the levels of program compliance.

(3) Elimination of 0/92, 50/92: The proposal to eliminate the 0/92 and 50/92 programs is projected to generate a budgetary savings of $580 million. This is a very optimistic estimate of the potential savings, if there are any at all. Without the use of offsetting annual acreage reduction programs (ARPs), over 12.1 million acres would return to production. Without some offsetting actions, crop production will rise, prices will fall and deficiency payments will

increase. And even if ARPs were to be increased, impacts on ARPs are not evenly distributed across all commodities.*

In addition, there are hidden costs involved in the elimination of the 0/92 and 50/92 programs. These programs require conserving use crops which tend to provide substantial soil conservation benefits.

(4) Increased User Fees and Assessments: The budget proposal, as currently structured, seeks to raise an additional $900 million over four years through additional assessments and user fees. There appears to be no relationship between program costs or benefits and the increased burden that will be borne by producers. If we examine federal expenditures associated with the dairy program for example, we note a substantial decline from the mid-1980s to the present.

Costs are not increasing and official estimates do not project an increase in the near future, yet it appears that dairy producers will be hit with a 67 percent increase in their "milk tax" or assessment. This would place their assessment at about 19 cents per hundredweight of milk sold and would generate approximately $288 million. This could come close to equaling, or in some years exceed, the government costs associated with the program. In fact, the assessment programs for sugar and soybeans are already net contributors to the federal budget. Thus, for these programs the assessments are not just an element of budget reduction, but rather they constitute a tax on sales or marketing rather than simple budgetary savings. This is not an equal sharing of the burden of deficit reduction.

U.S. producers are placed at a disadvantage in domestic markets since their production costs are raised by the amount of the increased assessment, while imported products have no similar levy to contend with. This makes producers less competitive and places them at financial risk.

We are also concerned about plans to increase inspection fees for meat and poultry. A basic responsibility of the federal government has been to provide for the health and safety of the American public. The meat and poultry inspection system has been designed to ensure public health. Consumers are the primary beneficiaries from the system rather than producers and thus should bear responsibility for its funding. Attempts to shift the cost to producers or industry will erode consumer confidence in the system and place additional stress on the rural economy.

Farm Bureau is concerned that President Clinton's proposal for reducing the deficit, if enacted, will severely damage conditions for agriculture. The energy tax will increase production costs, reduce farm prices and cause our products to be less competitive in world

* Annual ARPs would need to be increased by 3.4 percent for corn; 9.8 percent for grain sorghum; 13.9 percent for barley; 14 percent for oats; 5.3 percent for wheat; .7 percent for cotton; and 8.5 percent for rice. Increasing ARPs by this much would reduce net farm income by $805 million.

markets. Budget cuts for commodity programs would eliminate some very effective programs and destabilize to the agricultural economy. In light of the very significant and painful budget savings that agriculture has absorbed over the past eight years, this burden is excessive.

We are concerned that discretionary USDA spending, whether in agricultural research or plant and animal health, continues to be a target for deficit reduction. Many of these and other USDA programs are important to production agriculture and, in fact, merit increases. Any increases will require a shifting of resources from other USDA programs, and we ask the subcommittee to reallocate funds from lesser priority areas to those which have urgent need. A reallocation, rather than new spending, would enable the previous year's appropriations level to be maintained.

Farm Bureau's general position on the budget continues to be support for a freeze in total federal spending at the previous year's appropriations level with the exception of interest payments on the national debt and natural disasters. Spending restraint, rather than tax increases, must be imposed to balance the budget. Without spending restraint in every budget function, including defense and all entitlements, discretionary spending, which includes many USDA programs, will have to bear a disproportionate share of spending cuts.

We recognize that the subcommittee's task is not easy and would be pleased to provide you with additional information if necessary.

Written Testimony to the U.S. House of Representatives

Appropriations Committee Subcommittee

On Rural Development, Agriculture, and Related Agencies

DEVELOPMENT AND ASSESSMENT OF REMOTE DATA ACQUISITION AND DELIVERY SYSTEMS FOR WEATHER RELATED DATA IN AGRICULTURE

SUBMITTED BY:

MISSISSIPPI STATE UNIVERSITY COOPERATIVE EXTENSION SERVICE
MID-SOUTH AGRICULTURAL WEATHER SERVICE CENTER

DATE: April 22, 1993

DEVELOPMENT AND ASSESSMENT OF REMOTE DATA ACQUISITION AND DELIVERY SYSTEMS FOR WEATHER RELATED DATA IN AGRICULTURE

Agriculture is dependent on the environment for production of food and fiber. The purpose of this proposal is to assess the current meteorological technology and develop a parameter-based, spatially arranged data collection and dissemination system to support agriculture. This arrangement will increase availability and accuracy of real-time forecast information to agriculture for increased production assurance and environmental protection. Evaluations and arrangements of necessary weather and weather related parameters will be tied to proven simulation models, expert systems, and management programs and collected in a format for immediate use by producers and related agricultural industries. The Mississippi State University, Cooperative Extension Service and Agricultural Experiment Station, National Weather Service Mid-South Agricultural Weather Service Center, cooperating producers, and consultants such as AAI Corporation will jointly develop this project.

Agriculture depends on weather predictions and conditions to make decisions that affect profit and environmental protection. There are approximately thirty small, privately-owned weather stations in the Mississippi Delta. The greatest need by agriculture producers is short- and long-term forecast reliability, and accurate, field specific information, such as soil temperature, soil moisture, and solar radiation. This information would be derived from a regional data collection system and broadcast from one central location. More reliable information would help producers make better decisions that could change production programs to fit expected conditions, increase profit, and decrease risk of environmental disasters to land and water resources. The ability to access current and accurate information would be a tremendous asset to agriculture production.

There are several reliable crop models and software programs for use in crop production. These models are driven by some physical parameters and in a large part by weather information. GOSSYM-COMAX is a cotton crop growth model that is based on weather information and physical crop parameters that are measured in the field. There are several aspects to this model that are used by producers, such as irrigation scheduling, fertility applications, and crop maturity projections, which enhance harvest timing of the crop. At this time, the GOSSYM-COMAX Program is run by only a few production entities. A successful program requires weather data that is field specific, therefore most producers that use the model have purchased their own weather station to ensure accurate and timely weather information. Weather forecasts are also an integral part of the model to predict growth and development and crop needs in the near to distant future. Cotton growth and development can also be tracked very accurately by heat units.

Heat units, calculated on a 60 degree basis (DD60), are used by many producers to time the different stages of growth and maturity of the plant. The DD60 Program, incorporated with an irrigation scheduling program, could be used in a similar manner as the growth model for determination of critical growth stages. This information would assist in making certain field observations, such as tissue analysis for nutrient deficiencies, insect counts, or water stress levels.

In conjunction with the GOSSYM-COMAX model, an insect model is being developed and field tested at this time. The inputs to the insect model are all weather factors that can predict growth, reproduction, and movement of certain insects that pose a threat to cotton. Accurate weather information and forecasts will be imperative to accurately predict insect movement, development, and population build-up.

The Glycium model is a new model just being developed for soybeans. It will require some physical crop growth parameters but is driven mostly on local weather data. Localized weather stations will be needed to make this program readily adaptable by a large number of producers. Accurate real-time weather information is critical to this type of model, in addition to reliable short- and long-term forecasts.

Peanuts, which are a very important regional crop, are very susceptible to a disease known as Cercospora leaf spot. This problem is caused by adverse weather conditions and leaf wetness. There are some very good models to predict this disease and determine when a fungicide should be applied. The basis for the model is a leaf wetness sensor and accurate, real-time weather information and forecasts.

NWS/Mid-South Agricultural Weather Service Center at Stoneville, Mississippi, has access to weather information from 14 National Weather Service and FAA locations and 32 cooperative observers that record daily data. The Service provides agricultural weather advisories, 30- and 90-day outlooks, information to run three heat unit models, guidance to the NWS office at Jackson for agrometeorological forecasts, and data/climatological summaries for research. Most of these forecasts and weather information systems are disseminated through traditional sources such as newspaper, radio, television, and some call-in services. Some of the privately owned weather stations in the Mississippi are also accessed for weather information. Still, there is no information network to run the models on a regional basis. As stated, most field weather stations are privately owned, and the models are run on a producer's computer on site. This has severely limited the use of such programs.

The proposal will enable the Mid-South Weather Service to access state-of-the-art weather stations located spatially in the region. It will supply reliable data in a timely and accurate manner, and in an arrangement to improve weather forecast ability. The data availability will become more crucial as the NWS expands its Modernization and Associated Restructuring (MAR) and develops new mesoscale models for forecasting weather. The models will be designed to focus on short-term (less than 6-hours) weather forecasts. They also have the potential to provide information that has not been traditionally available, such as soil moisture, leaf wetness, and soil temperatures, from more reporting stations. With the development of new sensors and computer technology, the data collection can be automated and stored in the correct format to interface with existing or developing forecast models developed by the Weather Service. This type of system will allow Mississippi State University Cooperative Extension Service to access real time weather data, advisories, and forecast information, and transfer it to a distribution system based at Mississippi State University for access by agricultural producers, researchers, and related industries for immediate use.

The Mid-South Weather Service will interface with a computerized bulletin board system at Mississippi State through an Internet connection. There will be between two and five public lines available to access the bulletin board for current and historical weather data, forecasts, and advisories. Through this system, a producer will have the ability to run the model for cotton and soybean growth, the insect model, irrigation scheduling programs, heat unit programs, and the disease prediction model. Producers will also be able to look at any applicable data that is being collected by the system. Producers and related parties will be able to access the system by modem through the County Extension Service offices, or from the Cooperative Extension Service at Mississippi State University, to run the decision making aids or retrieve desired weather data. Special crop advisories by Extension and Research personnel would also be a part of the service offered by the bulletin board system, as well as the potential for an electronic mail system that connects a producer to the County Extension Office or the Cooperative Extension Service State Office at Mississippi State University. Through this system, a producer could eventually have access to internet or some other national electronic communication system for information and decision aids.

Implementation of the project will be in three phases. Phase one will include the assessment of available and needed weather data, specification of missing parameters, identification of spacial arrangements, determination of existing sensor technology, and a needs evaluation of new technology, data collection systems, proper formats and software/hardware packages for data management.

Phase two will involve the installation and implementation of hardware and software systems and sensors to the sites per phase one specifications. The sites will include two farms that produce cotton, soybeans, and peanuts. During this time, tests will be conducted to determine the data collection and delivery systems needed for the Delta Region. Phase three will see continued testing and plans for horizontal expansion of the program to create a statewide information network.

It has been estimated that up to 15% of all herbicides and insecticides are washed off by rains within 12 hours of application on most crops in the Mississippi Delta. Costs of chemical losses for cotton are estimated at $26 million per year on 1.3 million acres. With better, more spatially arranged soil temperature information, the initial fungicide treatments on cotton can be changed from an in furrow treatment, that costs $12-14 per acre, to a hopper box treatment, that costs only $2 per acre to apply. Hopper box treatments are used when good planting conditions exist; this provides a lower disease risk, but only if accurate soil temperature information is available. Therefore, growers who obtain this weather information should be able to use the less expensive hopper box treatment and still attain satisfactory control of soil fungi known to cause cotton stand reductions and loss. If the 1/2% yield loss to seedling disease stand reductions could be prevented by knowing proper soil temperature and short-term forecasts, it would return $4-5 million to agriculture in the Mississippi Delta. Twelve to fifteen percent of the cotton acreage is replanted in the Delta each year. If inappropriate environmental soil conditions could be avoided for seed germination, and stand reductions caused by the seedling diseases could also be decreased, producers could save about $6 million in replant costs annually.

An additional $1.2-1.4 million could be saved in insecticide costs if better weather information was available. Insect development and movement are mainly driven by temperature and wind movement. With better data available to predict such movement, insecticide applications for target pests would be accurate. Farmers would have higher degrees of control , and less environmental side effects would occur due to elimination calendar or "best guess" application methods that are so often used. Even resistant populations of insects could be controlled better if insecticide applications could be made within 2 days of hatching. This requires accurate timing that would be possible with better weather information.

Increased interest in early season soybeans has made specific soil temperature and weather information very critical. With early planting, seedling diseases are more prevalent. Better weather data would allow growers to decide if treatment was needed, thus saving $200,000 on 150,000 acres of early beans. Detailed weather forecasts and soil temperatures would tell a producer more accurately when to stop using fungicides for later planted crops. Better short-term forecasts would also save chemical wash-off on soybeans, with costs estimated at $7 million on 1.8 million acres. Further, better weather information would reduce the 10% replant on soybean acreage which amounts to $2.5 million per year.

Peanuts are a relatively minor crop in Mississippi with only about 6,000 acres. But in the Southeast Region, there are 1.2 million acres with 400,000 additional acres in Texas and Oklahoma. Leaf spot diseases caused by wet conditions during the growing season cause a 25-40% reduction of peanut yields in Mississippi alone. The leaf spot disease usually shows up within 40 days after planting. Growers routinely apply protective fungicides on a 14-day schedule. Most growers will apply a minimum of 10 fungicide applications per season at a cost of $12-14 per acre. Leaf wetness sensors permit applications to be based on conditions rather than a straight schedule, saving 2-4 fungicide applications per year. Savings could potentially amount to $25-60 per acre. This savings could affect the entire peanut acreage in the Southeast. Better timing of fungicides allows for better retention and control with less risk to the environment, due to increased applications or wash-off. These benefits add up to reduced production costs, more timely pesticide and fertilizer applications, greater environmental protection, less risk to farmers with reduced chemical contact, and generally healthier, more profitable production.

The focus of the project is to provide accurate, timely access to weather forecasts and weather data generated by the Mid-South Weather Service through the Cooperative Extension Service at Mississippi State University and the County Extension offices. This program seeks to improve weather data collection systems, soil temperature information, short-range forecasts, accessibility for the end user (agricultural producers), and an understanding by producers of how to utilize this information. The project will attempt to increase confidence in weather forecasts by agriculture, and deliver the information in an efficient and user-friendly manner.

Where available, existing weather stations will be utilized, with additional sensors added to collect soil temperature, leaf wetness, soil moisture, and other needed information to be used in the models, management programs, and expert systems.

The qualifications of the involved parties are very impressive. This is a joint effort between two cooperating private producers that harvest cotton, soybeans, and peanuts, Mississippi State University Cooperative Extension Service Scientists, Agriculture and Forestry Experiment Station Scientists, NWS Mid-South Agricultural Weather Service Center Scientists, and AAI Corporation Personnel.

Cost of the project will be $900,000 total for the three-year program.

Written Testimony to
the U.S. House of Representatives
Appropriations Committee
Subcommittee on
Rural Development, Agriculture,
and Related Agencies

Improving U.S. Agricultural Production Efficiency Through the Linkage of Decision Support Tools and State-of-the-art Weather Acquisition Systems

Submitted by

Faculty of the College of Agriculture of
The Pennsylvania State University

April 12, 1993

Written testimony by:

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To: Solicit Funding under Subtitle E of H.R. 3950 entitled Develop a National Agricultural Weather Information System to develop a state-of-the-art Weather acquisition system for linkage with agricultural decision support tools.

Executive Summary

Mission Statement - The purpose of this project is to develop weather data acquisition systems and link them with state-of-the-art decision support tools (expert systems, simulation models, geographic information systems, database management systems, and remote sensing) to improve farm profits while reducing environmental impacts of agricultural practices. Specifically, this project will identify specifications for a weather data acquisition system. Several products can result from this project, both in terms of hardware (weather data acquisition and other instrumentation), and software (weather and other input databases, decision support tools, and models).

Justification - The unpredictable nature of weather continues to be a major limiting factor to profitable and environmentally sound crop production. Two major groups of crop production inputs, fertilizers and pesticides, tend to be used at rates higher than necessary because of weather uncertainty and farm labor limitations. This leads to insurance applications of crop production inputs to buffer the farmer from major crop yield and quality losses. These insurance applications often do not reduce the risk of crop yield and quality losses. In these situations, the farmer incurs additional costs to crop production and increases the likelihood of toxic substances leaching or running into valuable water resources. Improved weather data acquisition to enhance the decision making process provided by several agricultural decision support tools will help a farmer minimize fertilizer and pesticide inputs through more refined targeting of needs, timing of applications, and rates of material. This will result in reduced input costs and increased profits while minimizing negative impacts on the environment.

Plan - The project is divided into three phases. Phase one will include the development of a prototype design of the weather acquisition system and its linkage with the available decision support tools. Instrumentation requirements and spatial arrangement of sensors will be based on previous research, experience of the investigators with agricultural system input requirements, the farm manager's needs, and the input needs of decision making tools identified for use on the farm. The assessment of the decision making tool requirements includes both identifying the types of input variables and determining the sensitivity of the tools to weather inputs. In addition, the decision support tools will be structured to accept weather data inputs from the weather data acquisition systems. In Phase two, instrumentation will be developed and installed at a site per phase one specifications. The test site will be a large dairy farm (Murmac Farms) which grows agronomic crops to feed the livestock. Phase Three will be the evaluation of the system's performance. The value of improved weather data acquisition on the farm for use in decision making will be determined by a detailed cost/benefits analysis.

Cost of Project - $900,000 for three years.

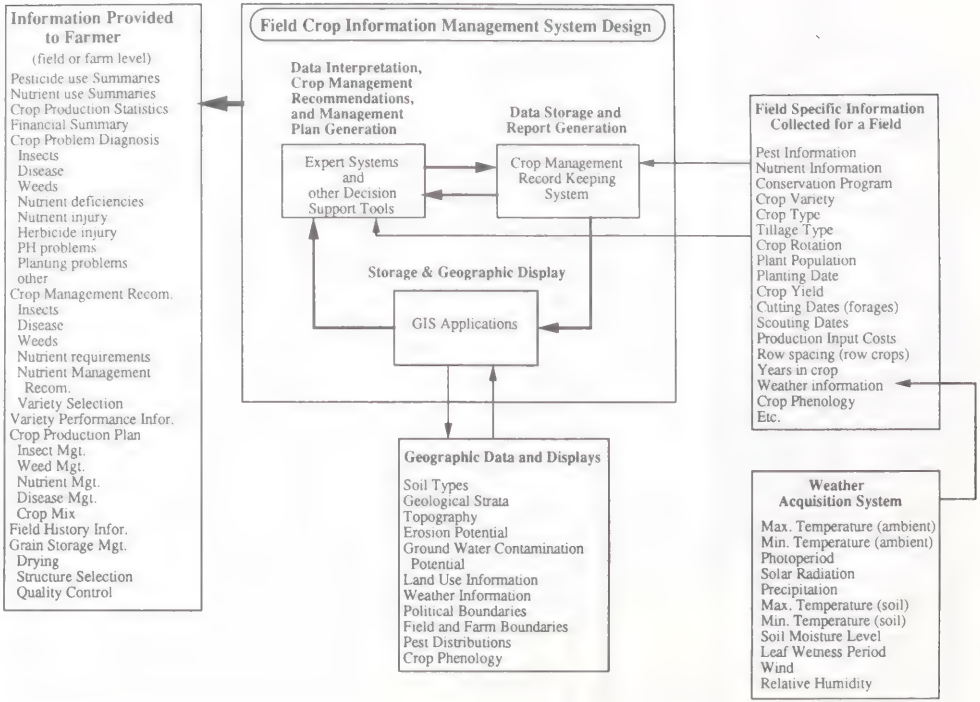
Potential Benefits of Project - As a result of this project, an estimated benefit to farmers of $84 million is expected, based on reduced input use and increased yields of agronomic crops in Pennsylvania. If expanded nationally, a benefit of at least $4 billion would be expected, without considering the cost of the weather data acquisition system. In addition, reductions in pesticide and nutrient use will reduce the potential for environmental contamination. Once the system has been developed and tested, additional decision support tools can be added to enhance the capabilities of the crop management advisor system. Implementation of the system will enhance the effectiveness of Cooperative Extension education programs and help private crop advisors provide services to their customers.

Mission Statement - The purpose of this project is to develop weather data acquisition systems and link them with state-of-the-art decision support tools (expert systems, simulation models, geographic information systems, database management systems, and remote sensing) to improve farm profits while reducing environmental impacts of agricultural practices. Specifically, this project will identify specifications for a weather data acquisition system. Several products can result from this project, both in terms of hardware (weather data acquisition and other instrumentation), and software (weather and other input databases, decision support tools, and models).

Justification and Background - The unpredictable nature of weather continues to be a major limiting factor to profitable and environmentally sound crop production. Two major groups of crop production inputs, fertilizers and pesticides, tend to be used at rates higher than necessary because of weather uncertainty and farm labor limitations. This leads to insurance applications of crop production inputs to buffer the farmer from major crop yield and quality losses. These insurance applications, however, often do not reduce the risk of crop yield and quality losses. In these situations, the farmer incurs additional costs to crop production and increases the likelihood of toxic substances leaching or running into valuable water resources. Improved weather data acquisition to enhance the decision making process provided by several agricultural decision support tools will help a farmer minimize fertilizer and pesticide inputs through more refined targeting of needs, timing of applications, and rates of material. This will result in reduced input costs and increased profits while minimizing negative impacts on the environment.

Faculty at The Pennsylvania State University have been working on a computer based Crop Evaluation and Decision Support System to assist farmers with crop production decisions (Figure 1). This system when completed will incorporate the power of expert systems, simulation models, database management systems, geographic information systems (GIS), and other decision support tools. The Crop Evaluation and Decision Support System will use computer

Figure 1. **Organizational Diagram of a Crop Information Management System for Field Crops**



technologies to acquire weather information through remote sensors; store field specific and spatially referenced data; analyze, interpret, and provide management advice using the collected data; and provide graphical displays of spatially referenced data.

A database management system has been developed and is being used by approximately 490 farmers in Pennyslvania to maintain field specific records on production inputs, pest information, and other production data. Field specific information relative to crop management is collected by field scouts and inputted into the database. This information is necessary to make refined management decisions that are tailored to the needs of an individual field; soil types, pest complexes, geological strata, topography, fertility, planting date, crop growth stage, and other site characteristics all vary between fields. Weather is the most important uncontrollable variable that affects crop management decisions. Using the information provided by the system, farmers in the program saved roughly $20/acre.

Expert systems have been developed to assist Pennsylvania farmers with crop production decisions for corn, alfalfa, and apples. An expert system is a computer program that captures the problem solving process used by experts and makes it available to non-experts on a timely basis. In addition to expert systems, simulation models are available to predict timing of key events in the life cylce of several insect pests and the growth and development of corn and alfalfa. These models can be used to increase the efficiency of pest scouting, timing of control actions, and to determine the need for control. The PLEX expert system links an alfalfa growth model and potato leafhopper (major insect pest of alfalfa) population model to predict the effect of the insect's feeding on crop yield. The MAIZE expert system is designed to assist corn producers with pest management and crop production decisions. The MAIZE expert system is currently being linked with the National Pesticide Risk Assessment Model (NAPRA), developed by the U.S.D.A. Soil Conservation Service, to evaluate the potential environmental impact of each pest management alternative recommended by the system.

Geographic information systems provide spatially referenced data for a number of variables; soil type and characteristics, geological strata, topography, soil erosion potential, and

depth to ground water. Several of these variables are important when evaluating the potential environmental affect of pesticides and nutrients at a given site. Using this information along with historic data, simulation models, and expert systems decisions about pesticide and nutrient use will be more environmentally sound.

When completed, the Crop Evaluation and Decision Support System will provide a wide array of important information for farmers. Information provided by the system includes: pesticide use summaries, nutrient use summaries, crop production statistics, financial summaries, crop problem diagnosis, crop management recommendations, crop production plans, field histories, etc.

Currently, we have good decision support tools to assist farmers with crop management decisions, but lack a good weather data acquisition system to acquire the types of weather information needed by the tools. Research is needed to determine the proper scale of weather information needed to drive these models and provide reliable decision support and to detemine the accuracy and precision required of this weather data, so the proper instrumentation can be developed. Because profit margins per unit of crop produced are extremely low for most agricultural commodities, the cost of these systems or information provided by the systems must be kept affordable for farmers.

Weather information can be provided at different scales, both temporally (over time) and spatially (over space). The temporal and spatial scales of example agronomic management decisions are shown in Figure 2a, and the temporal and spatial scales of weather information needed for those decisions are shown in Figure 2b. Although management decisions are made by a farmer at the farm and field level, the weather information that can assist with these decisions may be provided from a different scale. For example, the decision of when to plant a crop is a farm level decision made in the spring, but the time window of planting dates is based on climatological (historic weather information) averages over periods of 30 or more years. The

Figure 2a. The temporal and spatial scales of several key crop management decisions.

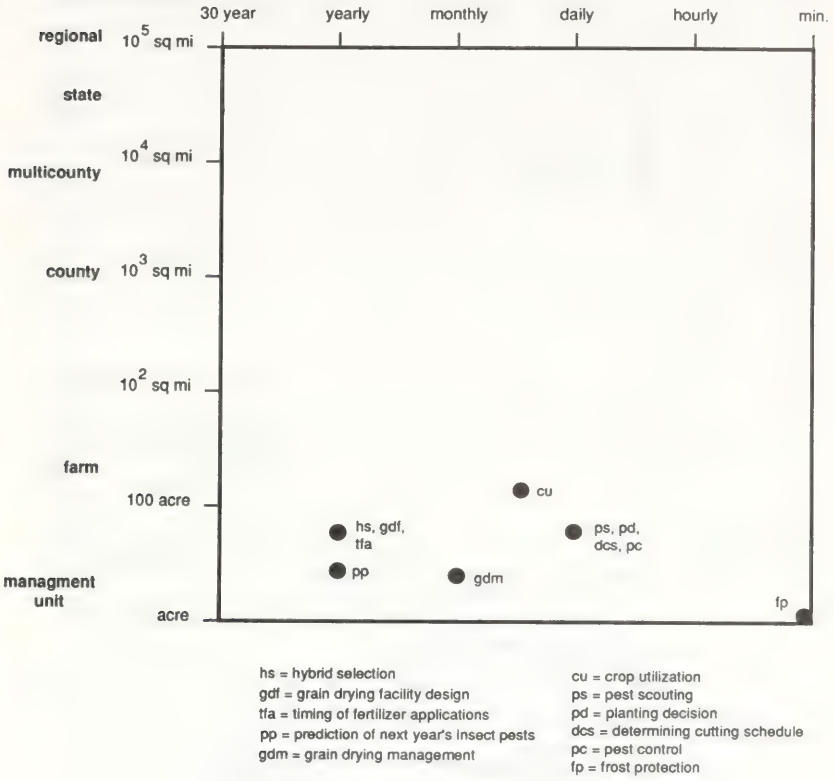
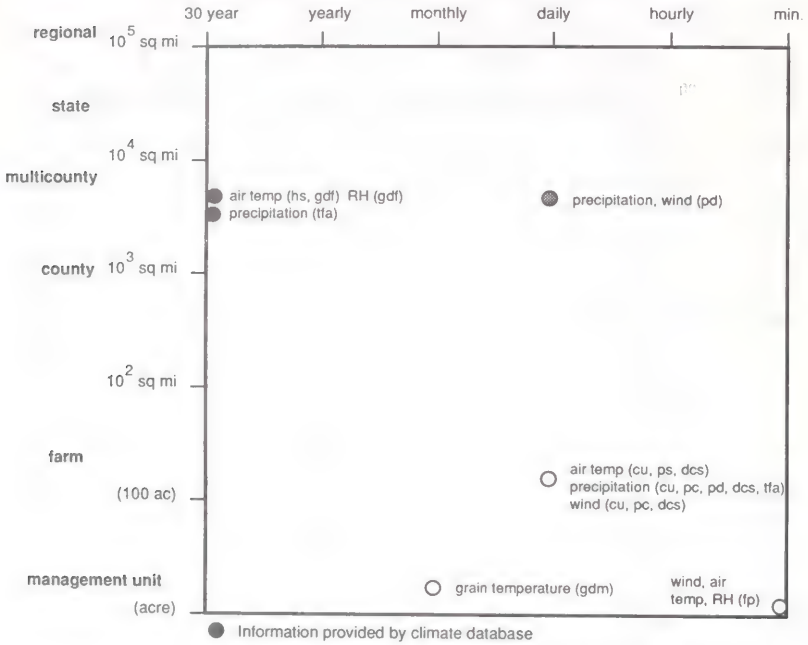


Figure 2b. The temporal and spatial scales of weather information needed for several key management decisions.



Decisions:

hs = hybrid selection
gdf = grain drying facility design
tfa = timing of fertilizer applications
pp = prediction of next year's insect pests
gdm = grain drying management
cu = crop utilization
ps = pest scouting
pd = planting decision
dcs = determining cutting schedule
pc = pest control
fp = frost protection

temperature measurements from which the climate data are derived, however, are most likely from sites that do not necessarily represent the microclimate of the farm, but the general area. The actual decision to plant would be based, in part, on daily observation of soil conditions in a field and air temperature on the farm as well as climatology. The farmer may rely, however, on air temperature and precipitation measurements that come from off-farm sources , such as county extension offices or the media (T.V., radio, newspaper). These measurements may or may not be representative of conditions on the farm. Therefore, it is important to determine if weather data must be collected on a farm or it weather data collected off the farm is accurate enough to assist with crop management decision making. Before efficient weather data acquisition systems can be designed and implemented, the economic costs and benefits of weather data collected at different scales and accuracy of sensors must be determined in order to develop affordable systems .

Potential Benefits of Project - An estimate of the benefits of having this information available for crop producers can be illustrated using an agronomic crop system as an example. It is estimated that the weather information resulting from this project will potentially increase the returns to corn production by 10%. For the test site (MurMac farm) involved in this study, a 10% increase in returns would be approximately $2,600 annually. Expanding this saving to Pennylvania and the United States, the total saving to all corn producers would be approximately $30.4 million and $2 billion annually, respectively.

A similar approach can be used for alfalfa, another important agronomic crop in Pennsylvania. A 10% increase in returns on alfalfa would be approximately $10,900 for the test site, and about $43.9 million for the state of Pennsylvania. If this 10% improvement in return is realized for all agronomic crops grown in Pennsylvania, the annual increase in value (based on increased income and reduced input costs) would be $84 million. If the system is expanded nationally and across other major agronomic crops, a conservative estimate of benefits to farmers would be $4 billion annually (not including the system's cost). Even a 2% change in profits would be $1.32 billion annually. Table 1 shows the number of acres planted and value of major

Table 1. Crop production statistics for major agronomic crops grown in the United States.

Crop	Number of Acres Grown Annually	Total Value of Crop ($1,000 per year)
Corn - Grain	69,857,993	$17,288,276
- Siliage	8,025,332	$2,277,736
- Total	77,883,325	$19,566,012
Soybeans	64,832,842	$10,912,122
Hay (alfalfa and other)	56,743,836	$8,039,833
Wheat	70,910,293	$8,053,318
Total	270,370,296	$66,137,297

agronomic crops grown in the United States in 1982 (The Census of Agriculture 1987). In addition to direct economic benefits for farmers, the general population would benefit from reduced use of pesticides and nutrients and improved environmental quality.

Once the system has been developed and tested, it can be continually expanded and its power enhanced by adding decision support tools as they become available. Although developed for a field crop system, with minor changes the system could be adapted to other cropping systems. Information provided by the system would increase the effectiveness of Cooperative Extension educational programs and help private crop advisors provide high quality services to their customers. The effectiveness of Cooperative Extension (both at the county, state, and federal level) would be greatly increased by improved timeliness of weather and crop production information supplied to farmers and the agribusiness community. Examples of the type of information that could be better provided to farmers by Cooperative Extension with a state-of-the-art weather data acquisition system include:

- weather forecasts and current conditions as they influence crop and farm management
- periods of insect and disease activity
- lists of control options and timing of control activities
- identification of optimal planting dates and nutrient levels
- the likelihood of water contamination by pesticides and herbicides applied on a given date
- optimal crop harvest periods
- likelihood of herbicide failures and losses of nutrients.

The Comprehensive nature of the Crop Evaluation and Decision Support System, also provides the Cooperative Extension Service with an organized presentation of state-of-the-art crop management knowledge that can be effectively used to teach farmers about the dynamic processes that influence decision making on the farm. As they understand the dynamic processes that influence crop production, farmers are better able to make informed judgements about the utilization of production inputs, such as pesticides and nutrients. The outcome of this educational

process, conducted through the Cooperative Extension System, is improved profitability for the farmer and reduced risk of environmental comtamination by crop production activities.

Questions that will be Addressed During the Project:

1. Which crop production management decisions can be improved by increased availability of weather data?
2. What computer based decision support tools are currently available to assist crop producers in making management decisions?
3. Weather data are needed to enable farmers to use these computer based decision support tools to improve crop management?
4. What type of weather sensors are needed to acquire the weather data?
5. What accuracy and reliability is required of the weather sensors?
6. At what geographical scale(s) (size of area) does the weather data need to be collected?
7. What will the final product look like?
8. What is the economic costs and benefits of the Crop Evaluation and Decision Support System?
9. How can the system be expanded into a state and national information network.

Plan - To answer the above questions, the project is divided into three phases. Phase one will include the development of a prototype design of the weather acquisition system and its linkage with the available decision support tools. Table 2 lists decision support tools that are currently available for incorportation into the Crop Evaluation and Decision Support System. Instrumentation requirements and spatial arrangement of sensors will be based on previous research, experience of the investigators with agricultural system input requirements, the farm managers needs, and the input needs of decision making tools identified for use on the farm. The assessment of the decision making tools includes both identifying the types of input variables needed and determining the sensitivity of the tools to weather inputs. In addition, the decision

support tools will be structured to accept weather data inputs from the weather data acquisition systems. Phase two will involve development of instrumentation and its installation at a designated site as determined by design specifications identified in phase one. The test site will be a large dairy farm (MurMac Farms) which grows agronomic crops to feed livestock. Phase Three will be the evaluation of the system's performance and the design of a state and national weather data acquisition system. The value of an improved weather data acquisition system to support on farm decision making will be determined by a detailed cost/benefits analysis.

How the Final System will Function - The functioning of the system can best be described by using an example of several days in the life of a farmer. It is mid-May and the heart of the corn planting season. The alarm clock rings and Mr. Super Farmer wakes up, takes a shower, shaves, dresses, and walks into the kitchen for breakfast. As he eats his breakfast, he is thinking about the activities of the day and what he will need to accomplish over the next week. He knows, however, that the weather over the next few days will have a great influence on what he can accomplish. Missing the opportunity to plant his corn crop at the optimal time will mean a yield reduction of 1 bushel of corn per day. However, if he rushes into planting and plants into soil that is too wet, he will cause a soil compaction problem that will last for several years and lead to shallow root systems on the corn plants. If his corn plants develop shallow root systems, they will be more susceptible to drought conditions and stresses from pests that lead to economic yield reductions. Therefore, planting must be timed properly to maximize yield potential of the crop.

Unfortunately, Mr. Super Farmer also needs to deal with several livestock problems and his alfalfa crop is almost ready for harvest. If each problem is not dealt with in a timely fashion, then he will lose income. Without any information on the current soil conditions and the future weather outlook, he does not have a clue as to which activity should take priority. Fortunately, Mr. Super Farmer has just installed a new Crop Evaluation and Decision Support System that utilizes real-time weather data automatically collected on his farm and from off-farm sources to

Table 2. List of decision support tools currently available for incorporation into the Crop Information Management System that require weather data.

European Corn Borer Management Model

- predicts key events in the insect's life cycle
- estimates losses caused by the insect
- estimates the benefits vs. the costs associated with a control action
- predicts optimal timing for scouting activities and control actions

Corn Rootworm Phenology Model

- predicts key events in the insect's life cycle
- predicts optimal timing for scouting activities

Black Cutworm Degree Day Model

- predicts key events in the insect's life cycle
- predicts optimal timing for scouting activites

Alfalfa Weevil Phenology Model

- predicts key events in the insect's life cycle
- predicts optimal timing for scouting activities

PLEX: An Expert System for Potato Leafhopper Management

- predicts key events in the insect's life cycle
- estimates losses cause by the insect
- estimates the benefits vs. costs associated with the control action
- provides textual information of insect biology and scouting methods

Continue Table 2.

MAIZE: a Decision Support Tool for Corn Management

- Comprehensive management tools for corn production, drying, and storage
- includes modules for pest management, hybrid selection, grain storage and drying facility design and selection.
- provides textual informtion on pest biology and scouting procedures.

Database Management System

- Stores field specific information on crop inputs, nutrient levels, pests, etc.

assist with this dilemma. Upon finishing his breakfast, he walks over to his computer to access the current moisture levels in the soil, air temperatures and wind speed. Transparent to the farmer, weather data sensors located on his farm are instantaneously measuring changes in temperature, moisture, wind speed, solar radiation, etc. The data acquired by the sensors is being sent to and stored in a database for use by the decision support tools and the farmer. In addition to the on-farm sensors, the Crop Evaluation and Decision Support System is providing the farm a direct linkage with the National Weather Service forecast information . This is far better information then he was able to get from a thermometer on the back porch, a rain guage on a fence post, and weather forecasts off the radio, T.V. and newspaper.

Based on the information, he now knows that there is a high probability of rain within the next two days and that the soil conditions are ideal for corn planting. It is now clear that he should allocate his time resources to corn planting today and deal with the livestock problem on the rainy days. If he can finish his corn planting before the rain begins, then his time will be free for haying the rest of the month. In addition, the Crop Evaluation and Decision Support System provides alerts to potential insect problems and reminds him of the nutritional needs of the corn crop to be planted in each field.

A week has passed and Mr. Super Farmer is now concerned about harvesting his hay crop. He knows that if he cuts the hay and it rains before the hay can properly dry, be baled, and moved into storage, he can lose yield as well as nutritional quality of the hay as livestock feed. Finding the ideal window for harvest can save him significant dollars, by eliminating the need to buy expensive feed suppliments.

Again, he sits down at his computer and accesses the Crop Evaluation and Decision Support System. Weather sensors remotely placed on the farm indicate that relative humidity is low and there is a 10 mile per hour wind blowing across the farm. Weather forecasts indicate that there will be at least three days of clear skies and 75 to 80^{o} F temperatures. This indicates that he has a long enough window to harvest his crop with a minimal risk of precipitation. After accessing the weather conditions, he also accesses information stored in the system by field

about insect pest pressure. According to the information, three fields have alfalfa weevil numbers above the economic threshold. However, the system recommends that instead of applying an insecticide he should cut the field immediately and then monitor the stubble for injury from the pest. He is also alerted that it is time to begin monitoring for several insect pests of corn.

One major pest of concern is the European corn borer. The period of concern to scout for this pest can be predicted with a simulation model. The Crop Evaluation and Decision Support System provides information on how and when to collect data to initialize the simulation model and directly provides the weather data needed to simulate the insect's development over time. By collecting the information on a timely basis he is able to accurately determine the period when he should begin scouting and mimimize the costs associated with scouting. In addition, he now has the information necessary to optimize the control tactics effect, minimize control costs, and minimize potential environmental contamination.

With this example, it can be seen that the Crop Evaluation and Decision Support System and the weather data acquisition system can provide valuable information to assist farmers in making important and timely management decisions.

Qualifications of the Research Team - Faculty at The Pennsylvania State University have developed computer based decision aids to assist farmers with crop management decisions. The Penn State Faculty involved in this project have many years of experience in the development of computer based simulation models, expert systems, geographic information systems, decision support systems, database management systems, and remote sensing. The team is made up of two Entomologists with approximately 35 years of combined expertise in insect pest management, two Agronomists with 35 years of expertise in land use analysis and crop management, an Agricultural Engineer with 12 years of experience in weather sensor use for decision making, and the Manager of the Agronomy Department's Crop Management Program in Pennsylvania (farmer-owned cooperatives that pool their funds to hire crop advisors) who holds a Masters Degree in Agronomy and has a farm of her own.

AAI Systems Management Incorporated is a subsidiary of AAI Corporation, a well known and very diversified defense contractor located near Baltimore since 1950. ***AAI is, like most defense contractors, attempting to diversify its customer base into the civilian economy.*** As a part of this effort, the company began to pursue a contract for a weather system with the Department of Commerce in 1987. AAI was successful in this pursuit, ultimately overcoming competition from General Dynamics, Lockheed, and Magnavox.

The new subsidiary, AAI/SMI, was chartered in 1991 to engage in business in automated weather, agricultural, and environmental systems. AAI/SMI now has 95 employees working in a "cluster" organization environment with a strong Total Quality Management (TQM) culture. Currently SMI's principal business activity is the design, manufacture, and installation of automated weather monitoring systems for airports. It is now installing approximately 1,100 Automated Surface Observing Systems (ASOS) at airports all over the United States under a contract with NOAA.

ASOS is a weather data acquisition, processing, report generation and dissemination system. As a result of the experience gained on the ASOS program, SMI has developed the required skills for design and implementation of fieldable data acquisitions systems required for agricultural applications. These skills include development of real-time software for algorithm processing and report generation, design of hardware which will work in any outdoor environment, and the ability to work closely with sensor manufacturer's' to improve their designs and lower their costs. They also have a proven ability to install systems with minimal interference with on-going operations, and to arrange for telephone and other forms of data communications.

As a natural outgrowth of its weather business, AAI/SMI has an active internally funded program to develop data acquisition and reporting systems for use in agriculture and environmental monitoring.

Zedx, Inc. is a small business involved in the development of software to manage weather data. They bring to the project expertise in agricultural meteorology, spatial interpolation and enhancement of weather data, simulation modeling, and statistical error analysis.

The MurMac Farm is owned by Murry McJunkin who has been farming full-time since 1975. He has completed doctoral degrees in Agronomy and Agricultural Education at The Pennsylvania State University. Prior to farming full-time, he worked for United States Steel as manager of the Agricultural Market Development Division. Murry McJunkin owns 537 tillage acres and rents an additional 125 acres (total acres farmed = 662). On his farm, he grows alfalfa, corn, soybeans, oats, grass hay, and canola.

Cost of Project - $900,000 for three years.

STATEMENT OF

CENTER FOR SCIENCE IN THE PUBLIC INTEREST

Bruce Silverglade
Director of Legal Affairs

* * * *

HEARING ON THE FISCAL YEAR 1994 APPROPRIATIONS FOR AGRICULTURE, RURAL DEVELOPMENT, FDA AND RELATED AGENCIES

Before The

House Committee on Appropriations

Subcommittee on Agriculture, Rural Development, FDA and Related Agencies

April 1, 1993

Washington, D.C.

The Center for Science in the Public Interest (CSPI)[1] is pleased to have the opportunity to submit this statement regarding the Fiscal Year 1994 appropriations for the Food and Drug Administration (FDA). CSPI would like to focus our statement on FDA's use of appropriated funds for the regulation of dietary supplements i.e., vitamins, minerals, herbs, amino acids, and other nutritional substances.

CSPI strongly opposes attempts by the dietary supplement industry to use the appropriations process to limit the ability of the FDA to prohibit misleading health claims on supplement products. The appropriations process should not be used to determine the regulatory treatment of supplements. This issue should -- and is -- being considered by the FDA and by the appropriate Congressional committees.

CSPI believes that dietary supplements may offer real health benefits and that the availability of safe, high-quality, and appropriately labeled supplements should not be restricted. A great deal of scientific evidence points to the potential benefits of many supplements and consumers should certainly have the right to purchase such products without government interference.

We also believe, however, that the right to choose dietary

[1] CSPI is a non-profit consumer advocacy organization located in Washington, D.C. CSPI was formed in 1971 and is now supported by more than 600,000 members, the sale of educational publications, and foundation grants.

supplements is undermined by misleading or inadequately substantiated health claims on supplement labeling. Unfortunately, such claims pervade the shelves of health food stores. We have attached advertisements for various supplement products that illustrate this problem and request that they be incorporated into the hearing record.[2]

The prevalence of misleading health claims is one of the reasons why Congress passed the Nutrition Labeling and Education Act of 1990 (NLEA). This law sets criteria that the FDA must follow when allowing health claims for foods and nutritional supplements.

Under the NLEA, the FDA was given discretion to regulate health claims for supplements more strictly, less strictly, or in the same manner as health claims for conventional foods. We believe that FDA correctly proposed that health claims for both foods and dietary supplements be supported by "significant scientific agreement." There is no public health rationale for setting a different standard for dietary supplements.

Some organizations have charged erroneously that the NLEA is being used by the FDA to ban the sale of some types of products. Although this charge is not true, the supplement industry continues to perpetuate this myth.

For example, in testimony before this subcommittee, the National Nutritional Foods Association (NNFA) refers repeatedly to **proposed** FDA regulations published in the Federal Register in

[2] See Appendix 1.

November 1991. NNFA claims that the FDA's proposed rules would make it difficult to sell high potency vitamin and mineral supplements that contain greater amounts of a vitamin or mineral than is normally found in foods. NNFA claims that these proposed rules represent:

> "a back door attempt by the agency to undermine Section 411 of the Food, Drug and Cosmetic Act which precludes limits on potency levels of dietary supplements."[3]

What the NNFA fails to mention is that whatever statements the FDA made in conjunction with its November 1991 proposed rules have been superceded by newer final regulations issued on January 6, 1993. While the legal effect of the FDA's final rules on dietary supplements have been nullified by the moratorium established by the Dietary Supplement Act of 1992[4], these regulations nonetheless represent the FDA's current policy.

In its final regulations, the FDA makes clear that it will allow a health claim for a dietary supplement that contains more of a vitamin or mineral than is normally found in food. The preamble to the FDA's final rules states:

> "Nothing in the regulations would necessarily prevent a supplement from bearing a health claim when that supplement contains a level

[3] Statement of Richard Meyers, Legislative Director, National Nutritional Foods Association, before the Subcommittee on Agriculture, Rural Development, FDA and Related Agencies, April 1, 1993, page 4.

[4] P.L. 102-571

of a substance that exceeds the level achievable in the context of the daily diet."[5]

In accordance with this policy, the FDA has, in fact, allowed health claims for calcium supplements that contain more than 100% of the U.S. Recommended Daily Allowance for calcium.[6]

NNFA's repeated reference to the FDA proposed rules that have been superceded by final regulations is disingenuous, if not outright misleading.

Although the FDA has made its position clear, the supplement industry continues to urge consumers to contact their elected representatives in support of legislation sponsored by Representative Richardson that would repeal portions of the NLEA. Many consumers, believing that the FDA is using its authority under the NLEA to ban the sale of certain types of supplements, are responding to this battle cry by writing Congress in support of these bills. Seventeen major national health and consumer organizations have written Congressman Richardson to express serious objections to this legislation.[7]

The public's misunderstanding about the effect of the NLEA and the impact of Congressman Richardson's bill is unfortunate. The NLEA is a landmark consumer protection law. Prior to the enactment of the NLEA, all health claims on food and dietary supplement labels were considered by the FDA to be illegal,

[5] 58 Federal Register 2500 (Jan. 6, 1993)

[6] Ibid.

[7] See Appendix 2.

unapproved claims for so-called "new drugs." In light of all the new knowledge about the benefits of a proper diet and supplements, Congress determined that well supported health claims should be allowed on labels. As a result of the passage of the NLEA, dietary supplement producers will, for the first time ever, be legally allowed to make health claims on certain products.

Under the NLEA, the FDA has allowed health claims for low fat, low cholesterol and low sodium foods, as well as foods high in calcium, vitamins A and C, or fiber. As previously mentioned, the FDA has also allowed claims for calcium supplements. We believe the agency should consider allowing additional health claims for supplements.

The NLEA sets up a procedure that allows consumers, supplement manufacturers, and others to petition the FDA to allow additional health claims. One need only show that the claim is supported by "significant scientific agreement" -- one does not have to provide the type of expensive clinical data necessary to gain FDA approval of a new prescription drug. This procedure ensures that health claims are reliable, protects consumers from fraudulent health claims, and increases the credibility of claims that are made.

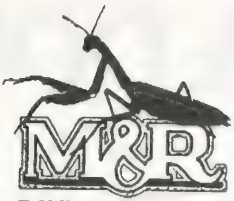
If this subcommittee prevents FDA from implementing this provision in the NLEA, it will be nearly impossible for the agency to prevent unscrupulous individuals (be they big or little companies, private nutritionists or physicians) from defrauding

the public by marketing supplements deceptively. For some consumers, it might become increasingly difficult to distinguish between products that make well supported health claims and others that promise a world of health benefits but deliver only broken promises.

We believe strongly that FDA should be allowed to proceed. If the FDA is prohibited from expending funds to implement its rules for health claims for dietary supplements, then unsubstantiated claims will continue to proliferate and consumers will not be able to depend on supplement labels for reliable health information.

In closing, we reiterate our opposition to attempts by the dietary supplement industry to use the appropriations process to limit the ability of the FDA to prohibit misleading health claims on supplement products. This issue should be left to the appropriate Congressional committees that were responsible for the NLEA and the Dietary Supplement Act of 1992.

We thank the subcommittee for the opportunity to submit this statement and would be pleased to submit any further information that the subcommittee may request.



M&R DURANGO, INC

STATEMENT OF LEE ANNE MERRILL, PRESIDENT

I am Lee Anne Merrill, President of M&R Durango, Inc., Bayfield, Colorado.

Our company has been in the business of rearing beneficial insects and organisms for the biological pest control industry since 1989. We make these beneficial's available for least toxic insect pest management to a wide variety of the agriculture food crop industry.

There is a desperate need for continuing research in areas of practical application, integrated pest management programs development, interaction of various chemical pesticides, fertilizers and other frequently used agents with beneficial organisms, consumer education efforts and species choice for specific insect pest control applications.

It is for these reasons that I ask that funds be appropriated for the research program at the Beltsville Agricultural Research Center (BARC) of the Agricultural Research Service. Included is research on microbial agents, predators and parasites and feeding stimulants currently underway. However, there is a need to strengthen this existing research by increasing the number of cooperative projects and establish integrated pest management model programs targeted at specific vegetable insect pests.

The Administration has requested additional funds for FY-1994 for strengthening the project as mentioned above. I strongly urge that the $500,000 requested be appropriated to the Beltsville Agricultural Research Center to assist in this development.

Sincerely, Lee Anne Merrill

Lee Anne Merrill
President

BIOLOGICAL SOLUTIONS FOR INSECT PEST CONTROL

6565 Highway 172 • Ignacio, Colorado 81137 Post Office Box 886 • Bayfield, Colorado 81122
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BEDOUKIAN
RESEARCH INC.
ORGANIC AROMA COMPOUNDS

I am Robert Bedoukian, President of Bedoukian Research Inc., Danbury, Connecticut.

Our company has been in the business of manufacturing specialty chemicals for use by the flavor and fragrance industry since 1972. Because the chemistry is so closely related, we have become increasingly involved with the manufacture of insect behavior modifying compounds, i.e. pheromones.

There is a particular need today to integrate efforts on developing biological controls with the environmental and human health aspects of pesticide use. Because of the nature of many insect behavior modifying chemicals, limited market constraints coupled with the regulatory climate make it difficult for the industry, which is composed primarily of small companies, to provide the basic research necessary to ensure effective implementation of these technologies.

In addition, while EPA seems receptive to encouraging these technologies, they need the appropriate scientific documentation to justify the necessary regulatory assistance.

It is for these reasons that I ask that funds be appropriated to establish a model program at USDA's ARS labs in Beltsville to develop biologically effective control which was previously provided by insecticides that are no longer effective or that are no longer available due to regulatory actions. Methods to be studied would include behavior modifying chemicals, other naturally occurring chemicals, microbial agents, parasites and predators. Additional technical assistance in obtaining regulatory approvals, particularly for experimental use, should be provided. Specialized technical information systems for developers and computerized decision support systems for end users should be developed.

I strongly urge that $500,000 be appropriated to the Beltsville Agricultural Research Center (BARC) in the FY 1994 to establish a model program specifically designed to assist in the development of biologically based methods for control of agricultural insect pests.

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STATEMENT OF

MARINA GRANT

OF GRANT COMMUNICATIONS

SUBMITTED TO THE

SUBCOMMITTEE ON RURAL DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

APRIL 23, 1993

Mr. Chairman and Members of the Subcommittee, thank you for allowing me to submit a written statement into the hearing record reserved for Outside Witnesses and Members of Congress.

I am Marina Grant, President and founder of Grant Communications, a consulting firm specializing in human resource management. Grant Communications is a small 8(a) certified business with headquarters in Del Mar, California and branch offices in several major Federal employment locations across the U.S., including Arlington, Virginia and Chicago, Illinois. We have successfully completed several contracts with Agencies and Departments of the Federal Government and hope to do more in the future. That is partially the purpose of submitting my written statement.

Grant Communications has an expertise in EEO investigations. We have been informed by USDA personnel since September 21 a contract will be let shortly in the EEO investigative services area. We have asked that Grant Communications be designated a part of the work in compliance with Section 8(a) set aside provisions. We have met with several representatives from USDA personnel, and all of our meetings have been conducted with positive overtones and in a manner that promises short time frames for decision making. However, the contract has not been awarded.

If we are able to secure the 8(a) contract for EEO investigations with USDA, we would like to begin to coordinate the USDA work plan with other Federal Government contractual work we are undertaking.

My statement is submitted not as a criticism but in support of USDA's efforts in trying to improve its EEO compliance and investigations activities. I would ask that the Subcommittee encourage USDA to move expeditiously on the selection of the 8(a) contractor to conduct EEO investigations. It would be good public policy for USDA to proceed on the important human resource issue, and, if Grant Communications is the contractor selected by USDA, we would certainly strive to carry out our responsibilities in an efficient, timely and professional manner.

Thank you again for allowing me this opportunity to submit testimony for the record.

STATEMENT OF

GARY MCDANIEL

SMURFIT FLEXIBLE PACKAGING

SCHAUMBURG, ILLINOIS

ON BEHALF OF THE

DEFENSE RATIONS MANUFACTURING ASSOCIATION

(DRMA)

TO THE

SUBCOMMITTEE ON RURAL DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

APRIL 23, 1993

Mr. Chairman, thank you for this opportunity to submit a written statement for the record on behalf of the Defense Rations Manufacturing Association (DRMA). I am Gary McDaniel, President, of Smurfit Flexible Packaging, a division of the Jefferson Smurfit Corporation. Smurfit flexible Packaging converts and laminates flexible films and foils to meet rigid specifications and develop high quality packaging of health care, pharmaceutical and food products for the consumer, industrial and military customers. Our facility in Schaumberg houses both our headquarters and manufacturing activities related to retort (entree) pouches, bread, cake and fruit pouches. Our Milwaukee plant manufactures all polyethylene films consumed in this packaging. The two plants together employ 250 personnel.

Although we are not an agricultural producer, our business is directly related to the research and application advances made over the past 25 years in USDA supported programs associated with the processing, packaging, marketing and distribution of food products as they make their way from the agricultural producer to the agricultural consumer.

Several government sponsored research and industry support activities within USDA have contributed to the development of processing and packaging techniques that allow once perishable commodities to remain fresh and edible for extended periods of time. The industry association with which we are associated, the Defense Rations Manufacturing Association (DRMA), is comprised of

14 members, most of which are small to medium sized businesses, that produce or assemble the military field ration, MRE, or Meals, Ready-to-Eat. These rations are designed to have a shelf stable life of five years, though there have been instances in which seven or eight year old rations have maintained their quality and have been utilized successfully in disaster assistance and humanitarian aid situations.

Those of us in the MRE industry began three years ago to pursue constructive civilian avenues of MRE use in order to preserve the current industrial base (to meet potential surge and mobilization situations such as that presented by Operation Desert Storm) and achieve a balanced MRE utilization between the defense and civilian sectors. In a sense, we sought to establish a defense conversion policy in the food industry before it came into vogue.

To be brief, our objectives are summarized as follows:

-- Mandate a three year shelf life for MREs in DOD;

-- Make MREs available as an item in the U.S. Foreign Military Sales Program;

-- Utilize MREs in excess of three years of age for humanitarian purposes, such as

 - o disaster assistance until regular food transportation infrastructure can be restored;
 - o famine relief where international response is needed; and

- o donations of excess MREs to homeless shelters and homeless assistance organizations in the U.S.

In another context, the industry would like to seek the assistance of this Subcommittee in appealing to the Department of Agriculture for assistance. Where most of the industries involved in military contracting are turning to the Department of Commerce for assistance in the defense conversion process, it is only logical that those of us involved in food preparation, processing and packaging should turn to the Department of Agriculture. USDA's broad missions, and extensive research and agricultural industry support programs, logically lend themselves to assist DRMA in finding alternative productive outlets for the sophisticated processing and packaging expertise mastered by the MRE industry. While we currently have little or no relationship with the relevant elements within USDA, we could envision requesting help in establishing a civilian foreign markets sales program for U.S. MRE production, and helping further the technologies of processing and packaging for a broader array of uses than the narrow scope of current thinking.

Selected members of our industry will be requesting to meet with USDA personnel shortly to discuss what existing opportunities and programs USDA currently administers. We would like to ask this Subcommittee's assistance in urging USDA and its component elements to direct its focus toward developing some curative strategies that could offer useful and productive supplies of food, utilizing the

skills of processing and packaging that exhibit the unique talents and strength of the MRE industry.

At first glance, it would appear that the Foreign Agricultural Service could be a source of assistance in the area of foreign marketing and sales, that the Agricultural Research Service could be of assistance in helping to determine what kind of packaging standards less rigorous than those employed DOD could be utilized for commercial and civilian needs, and the thoughtful, analytical capabilities of the Economic Research Services could be utilized to study and report on the types of demand that a supply of pouched shelf stable food can meet in today's world, and in today's market within the U.S. The rigid standards and specifications to which MREs are packaged represent a height to which other shelf stable packaging uses and objectives need not reach.

We are not asking for additional funds for these activities. We do feel, however, that the role of USDA is crucial in maintaining this industry by helping the member companies of DRMA adapt to the changing world situation and its ripple effect upon DOD contracting.

We do feel that the activities outlined above are clearly within USDA's missions and goals, and perhaps that these types of activities should have been undertaken long ago. Nonetheless, it is crucial that USDA's expertise be employed now in planning with the MRE industry a strategy for the future that meets both civilian and military national goals and objectives.

There are some who feel this range of programs should be of the highest priority, because it represents an existing sector of the agricultural economy whose employment numbers are at risk. The potential loss of jobs from relying on DOD needs only could be substantial. Our first and highest priority is to avoid a decline in employment within the MRE industry.

While funding has been tighter and tighter every year, there must certainly be some nonrecurring expense items from FY 1993 that could be diverted in FY 1994 toward addressing some of these concerns. Because we are not seeking any extramural funds, we would ask that you seriously consider the matters this statement covers in your Subcommittee's deliberations.

Thank you again for this opportunity to provide a written statement in the record of the Subcommittee's hearings.

American Indian Higher Education Consortium

TESTIMONY PRESENTED TO THE APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, U.S. HOUSE OF REPRESENTATIVES: OUTREACH AND ASSISTANCE FOR SOCIALLY DISADVANTAGED FARMERS AND RANCHERS, FOOD, AGRICULTURE, CONSERVATION, AND TRADE ACT OF 1990 TITLE XXV, SECTION 2501

APRIL 23, 1993

Through the 1990 amendments to the Food, Agriculture, Conservation and Trade Act, tribal colleges were added as eligible applicants for the first time in history. Title XXV is intended for unserved or under-served communities, which certainly would include the reservations served by tribal colleges as perhaps among the most historically unserved communities in our nation. This program is within the extension service and includes the giving of instruction and practical demonstrations in agriculture and home economics and subjects relating thereto to persons not attending [Land-Grant institutions] in the several communities. The needs of these special populations for an extension service appear to have been fulfilled by the provisions to some 74 designated Land-Grant colleges and special population colleges throughout the nation. In part, these programs provide extension services to be operated by land grant colleges, Historically Black Colleges and community colleges of the territories. Glaringly absent from agriculture appropriations are the nation's Indian colleges. Although still in their infancy in terms of our nation's history of higher education institutions, the nation's 27 Indian and tribal colleges today serve over 16,000 students from a multi-reservation population of over 457,000 American Indians, and today take their valid place among American colleges.

The American Indian Higher Education Consortium applauds the Congress action when last year for Fiscal Year 1993, this Committee recognized the heretofore exclusion of American Indian Colleges from participation in Agriculture programs, and appropriated $1 Million under Title XXV, intended by the Congress to reach tribal colleges:

> Indian tribal community colleges are experinced in providing agriculture education and outreach and technical assistance to encourage socailly disadvantaged farmers and ranchers. The Committee notes the potential for agricultural development on Indian reservations and urges the Department to consider the requests of the tribal community colleges. (Report 102-334).

American Indian Higher Education Consortium

The American Indian communities are the last of any American populations to achieve access to agriculture funds. Section 2501 of the Food, Agriculture, Conservation, and Trade Act of 1990 is designed, in part, to help meet the need for extension services of American Indian populations throughout the U.S. This statute provides an authorization of $10 million to "assist socially disadvantaged farmers and ranchers to own and operate farms and ranches and to participate in agricultural programs." An appropriation for this program would provide the American Indian communities a strong foundation toward building extension service programs to adequately serve their populations.

These funds could be instrumental for some of the tribal colleges to begin providing the types of agriculture outreach and assistance that otherwise do not reach the reservations. However, not all tribal colleges will be able to partake of this $1 Million. The Department has advertised it to open-bid to all community-based organizations, as well as to those land grant colleges already partaking of some $650 Million in earmarked funds from Department of Agriculture. Federal Register guidelines issued by the Department establish $50,000 as a maximum grant. Surely, with an average $ 9.85 Million in earmarked Agriculture funds received per land grant college, it is not unreasonable to request that the Department reserve this tiny amount of funds solely for Indian colleges.

Further, $1 Million is not adequate to fund potential programs at all of the tribal colleges since other minority-serving institutions are explicitly eligible as well, ie. 1890 Land Grant Colleges. We recognize that this Program will also be of benefit to these colleges with similar agriculture extension efforts. Nevertheless, these colleges already have access to the more than $650 Million for Land-Grant college programs which includes funds for the Agriculture Extension Service; the tribal colleges do not have such access. AIHEC applauds the Department of Agriculture's commitment to offering educational opportunities to special populations. We urge that this Committee ensure that this commitment extends also to Indian colleges, in order that greater strides might be made toward equal educational opportunities for American Indians. We request that the fully authorized amount of $10 Million under this Program, as recommended by the Administration's Budget Request, be earmarked for the tribal controlled postsecondary institutions to provide these much needed extension services. While $10 Million certainly is a generous amount it equates to only $370,000 for each of the 27 tribal colleges, an extremely modest amount of funds to run an extension service program.

Outreach to disadvantaged farmers and ranchers would be an improvement toward economic self-sufficiency for impoverished Indian people living on reservations. When individuals are able to become self-sufficient, they are removed from the rolls of welfare and federal assistance. Thus, this would be a wise Federal investment rather than just an expenditure.

American Indian Higher Education Consortium

The tribal colleges have prepared plans to use funds under this section for a variety of agriculture and related programs. The colleges have interests in providing services in the areas of farm management, livestock and range management, agribusiness, commercial fishing, wildlife and natural resource management, environment, and forestry. Needed services that the tribal colleges may to provide through this program range from finance and farm record management to on-site education in fish hatcheries, farm/ranch management, and the environment. In regard to the page limit imposed on testimony to the Subcommittee, we have included synopses of planned agriculture programs from each tribal institution as an appendix in order to best display the types of services in need of funding on the reservations.

Many of the programs described in the appendix have been in operation in the past, but are now defunct due to loss of funding. For example, Sisseton Wahpeton Community College operated a program in 1988-89 on Agriculture and Agri-Business as part of their Vocational Education program under the Carl Perkins Vocational and Applied Technology Education Act, P.L. 101-392. However, the program was "de-funded" in 1990. Other tribal college programs have met similar fates, such as Crownpoint Institute of Technology's Range Management Program.

With all the experience and knowledge that they have regarding the agricultural condition and needs of their reservations, the tribal colleges are in the most logical position to offer much needed research and assistance and outreach for American Indian farmers and ranchers. We thank the Subcommittee for considering our request for full funding of the Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers, earmarked for the tribally controlled postsecondary institutions.

APPENDIX

BAY MILLS COMMUNITY COLLEGE

Brimley, Michigan

The Bay Mills Indian Community, historically a fishing tribe, has often experienced lower catches due to pollution of the Great Lakes, court ordered zoning of tribal fishing areas, and depletion of stocks of whitefish, trout, walleye, and perch. Therefore, the tribe, in consortium with its community college, has need to construct a fish hatchery to raise whitefish, lake trout, walleye, and perch. The effort will be assisted by the Chippewa Ottawa Treaty Fishery Management Authority.

BLACKFEET COMMUNITY COLLEGE

Browning, Montana

The Blackfeet Indian Reservation consists of 1.525 million acres of land (approximately 52 miles wide and 58 miles across). The land is primarily 70% range and 30% farm. The major economic source of income on the reservation is agriculture related businesses. In the latter years of the 1980's the agriculture sector of our reservation took a drastic down-turn (50%) due to prolonged drought. They are now in the rebuilding stages.

In a recent survey of Community needs, agriculture-based businesses (ranching, farming, retailing, etc.) indicated a need for an Agri-Business training program. The Blackfeet Community College would like to respond by securing financial resources for development and implementation of an Agri-Business curriculum. This curriculum would promote full participation of Tribal members into securing economic benefits through agriculture.

CHEYENNE RIVER COMMUNITY COLLEGE

Eagle Butte, South Dakota

The Cheyenne River Community College, through an affiliate agreement, proposes to design and deliver Ranch and Natural Resources Management courses leading to a Certificate or two-year degree to interested Cheyenne River Sioux Tribal members. Holistic resource management concepts will be practiced within the structure of curriculum and in the teaching methods.

The reservation land base is approximately 3.2 million acres, a predominant portion being appropriate for livestock production.

However, lack of consistent, overall management of these resources limits the actual productive use of the existing land base for livestock production. This also impacts the balance of wildlife habitat, the environment, and other natural resources. CRCC proposes to establish an educational mechanism for future land use.

CROWNPOINT INSTITUTE OF TECHNOLOGY

Crownpoint, New Mexico

The Crownpoint Institute of Technology Livestock and Range management Program has been designed to meet the expanding demands of modern society, changing employment requirements, and declining western ranges. Graduates will have a broad and well-rounded background which will enable them to be hired in entry-level positions in Forestry and Range Technicians, Feed Lot Assistants, Veterinary Assistants, and Range Management Assistants. Since graduates will be versed in the economic and social problems of the Navajo lands and its people, they will be qualified for positions as Land Board Members, Grazing Committee Members, and consultants to Local Chapters and other Governmental Departments with regard to land and agricultural reform.

Students are required to complete a series of courses at several levels, some being prerequisite to advanced courses. The level of course work challenges that of most colleges and universities. Laboratory or ranch/range work will be "hands-on" and will involve practical methods of handling, planting, and physical work at the Crownpoint Institute of Technology campus or its Ranch facilities. Feeding and care of CIT livestock will be also be the responsibility of each student as part of their education.

D-Q UNIVERSITY

Davis, California

D-Q University offers an Associate of Science in General Agricultural Sciences. The courses offered concentrate mainly on Farm and Range Management: from Animal Science to Agribusiness to an agriculture internship. General Agriculture is a two-year program designed to give students a broad understanding of areas without specialization in one area. The General Agriculture major provides a pre-service program for students planning to enter the field of agriculture after two years of course work; a transfer program for students who wish to pursue a Bachelor's Degree at a four-year college or university; and an in-service program of courses for particular job skill improvement for persons currently employed in agriculture and related areas.

American Indian Higher Education Consortium

DULL KNIFE COMMUNITY COLLEGE

Lame Deer, Montana

Dull Knife Community College is proposing to develop a rural Mental Health Program to deal with the stress and stressors encountered in isolated areas such as eastern Montana. Shifts in policy and economics related to the agriculture industry puts farmers and ranchers at a disadvantage in that services are not available to deal with Mental Health issues such as depression, suicide, substance abuse, and other symptoms related to stress.

FOND DU LAC COMMUNITY COLLEGE
Cloquet, Minnesota

The Fond du Lac Community College would utilize this legislation in application to include the Fond du Lac Lake Superior Band of Chippewa, a federally recognized tribe, to enhance academic opportunities for students and community of Minnesota's first tribal college by developing an agricultural program to include wild rice and berry commodities. These resources, native to the region, could also potentially create desperately needed employment opportunities in agricultural relate fields in Minnesota. Agricultural education is a critical component of American Indian tribes and college as we seek to effective and efficient methods in utilizing our resources. An agricultural program at the Fond du Lac community College, once developed, would make a lasting contribution towards academic and economic success in the region.

FT. BERTHOLD COMMUNITY COLLEGE

New Town, North Dakota

Ft. Berthold Community College offers an Associate of Applied Science degree in the field of Farm/Ranch Management. The courses offered constitute a wide variety of subjects in this field. Courses offered include Livestock Production, Farm and Range Management, Farm/Ranch Internship, and Animal Science.

Ft. Berthold also provides on-site individualized instruction to help farm/ranch producer families achieve their business and personal goals through improved farm/ranch management. This project, the Assistance, Counseling, and Training (ACT) Project was awarded to Ft. Berthold Community College in January, 1992 from the Farmers Home Administration and is the only one of its kind in the U.S. Participants in the project can take one course per semester free of charge during the academic school year.

FT. PECK COMMUNITY COLLEGE

American Indian Higher Education Consortium

Poplar, Montana

Ft. Peck Community College offers an Associate of Science degree in Natural Resource Management, which is designed to be transferable for students wishing to continue at a four year institution and complete their undergraduate program. Students seeking an Associate of Science degree in this program are required to complete courses pertaining to Fish and Wildlife Management and Environmental Science.

LAC COURTE OREILLES OJIBWA COMMUNITY COLLEGE

Hayward, Wisconsin

The LCO Objibwa Community College is located in northwestern Wisconsin, the dairy state, on the Lac Courte Oreilles reservation. The reservation consists of 76,464 acres of which 41,000 acres are virgin timber forests. There are 10,400 acres of water in 25 lakes; wetlands, wild rice beds and cranberry marshes. A 3.5 mega-watt hydroelectric plant on the flowage is solely managed by the LCO Tribal Governing Board. LCO College will provide outreach training to tribal enterprises and individual entrepreneurs managing timber, water, and agricultural resources. In view of the size and variety of LCO natural resources, the College has developed a two plus two Natural Resources Management degree. Students matriculate two years at LCO College with a transfer to UW-Stevens Point to complete a four year degree in Natural Resources Management. LCO receive an associate of Science degree in core natural resource areas of forestry, water (fisheries), or wildlife management (indigenous plants and foods). All students participate in hands-on direct experiential learning through field practicum and internships. Students may be employed with the tribal conservation, the Great Lakes Fish and Wildlife Commission, the State of Wisconsin, or the National and State forests. Funding would be utilized to: 1) hire full-time instructors; 2) purchase for a water quality testing lab an training; and 3) obtain equipment to enhance training in reforestation, aquaculture, and crop production of indigenous foods.

LITTLE HOOP COMMUNITY COLLEGE

Ft. Totten, North Dakota

Little Hoop Community College already has a Natural resources Program that, with additional staffing, could easily absorb an agricultural education program. The existing Natural Resources Program has a complete Fish and Wildlife Education Program, which supplements a Range Management and Environmental Education section. The program offers an Associate of Applied Science degree in Fish and Wildlife Management. The curriculum is designed to train

students for paraprofessional or technician positions. Areas of emphasis involve a concentration in Fish and Wildlife, Techniques, Law, and Pre-employment Training. Also offered are an Associate of Science degree and a Natural Resources Certificate in this field.

The Little Hoop Community College Natural Resources Program is presently assisting the tribe in developing their existing resources with a current emphasis on fish and wildlife and wind generated electricity. However, there are no tribal programs to assist and educate local farmers in current land use practices that will maximize the development of these resources. In order for Little Hoop Community College to meet the needs of and agricultural education program it would have to hire an Agricultural Specialist/Instructor, a Natural Resource Instructor, and a Soil/Range Scientist; provide travel money for field work; and purchase some additional agricultural education supplies and equipment.

NAVAJO COMMUNITY COLLEGE

Navajo Nation, Arizona/New Mexico

Navajo Community College has among its resources quantities of land that was once given to the College by the Navajo Tribe to utilize in training and teaching Navajo people in all aspects of farming. Although a once valuable and flourishing part of a teaching program, it is no longer in existence due to inadequate funding. With Shiprock, New Mexico being the heart of an agricultural location, revitalizing the Farm Training Program at Navajo Community College (which has a campus located at Shiprock) for those who want it and to develop an agriculture extension service for those who need it will greatly benefit Navajo people.

In order that Navajo Community College meet the needs of such a program, funds need to be provided for land development, irrigation system implementations, water conservation measures, building repair and renovations, farm equipment and tractor maintenance, operational expenditures, and classroom facility improvements. Present management will oversee and coordinate this program. Adjunct faculty will be employed to accommodate educational courses. Local area public service personnel will offer practical application workshops. Two full-time temporary farm workers will be employed to ensure adequate irrigation and harvest of crops produced.

NEBRASKA INDIAN COMMUNITY COLLEGE

Winnebago, Nebraska

Nebraska Indian Community College offers a One Year Diploma Program

in Food Production and Preservation. Students take a wide variety of courses which include Marketing; Agriculture Chemistry; Horticulture, Greenhouse Management, and Orchard Planning and Management; Weed, Pest, and Disease Control; and Food and Food Preservation.

Nebraska Indian College would like to reactivate its Farm and Ranch Production and Ranch Management Program if additional funding for the program could be made available. Reactivating the two-campus program would require establishing new offices, recruiting of students, hiring of full-time and adjunct faculty members, and establishing a technical assistance center for the tribes and for Indian farmers and ranchers on the three reservations Nebraska Indian College serves. The academic portion of the program would lead to nine month certificate or an Associate of Science Degree.

NORTHWEST INDIAN COLLEGE

Bellingham, Washington

Northwest Indian College is located near the Lummi Indian reservation on the northern coastal area of Washington. Much of the Lummi people make their livelihood from fishing and harvesting products from coastal waters. Upon funding for an agricultural program, Northwest Indian College will develop an on-site education program with a student internship program through the Lummi tribe's oyster hatchery. This program could also be extended to include training in the local fish hatchery. Through renovation, five currently unused buildings, that were a part of the former Lummi School of Aquaculture, can be used for classrooms and a fish/oyster hatchery and laboratory.

OGLALA LAKOTA COLLEGE,

Kyle, South Dakota

Oglala Lakota College has an Associate of Applied Science degree in Agriculture Range Management, Associate of Arts degrees in Natural Resources Management and Agriculture, and a Certificate in Wildlife Management. These degrees involve studies in courses including Range and Forest Principles, Environmental Sciences, Technology, Farm and Ranch Management, Crop Production, Environmental Conservation, and Internships for students to gain field experience.

SALISH KOOTENAI COLLEGE

Pablo, Montana

Salish Kootenai College offers an Associate of Science degree in Forest Technology and an Associate of Science degree in Natural Resources. The Forest Technology curriculum provides the opportunity to study forest management, forest measurement technology, and related ecological studies. The subjects are designed to provide the skills necessary to work in forestry occupations within the reservation area, the Forest Service, and various other Natural Resource Management Agencies. The degree in Natural Resources is designed to prepare students for employment as resource technicians in wildlife, fisheries, geology, hydrology, and outdoor recreation. They will also have basic skills in measuring, analyzing, and recording natural resource availability and use. Beyond the basics of management, this program will place resource use in the context of traditional cultural values.

It is the desire of Salish Kootenai College to help the Indian community become more proficient in the use of their agricultural resources and to encourage more people to become engaged in farming, livestock raising, and gardening. The college has plans to begin a program of course work to satisfy the community's agricultural education needs. The major costs of the program will be instructional costs and the costs of providing instructional and demonstration materials.

SINTE GLESKA UNIVERSITY

Rosebud, South Dakota

Sinte Gleska University has a long standing goal of serving ranch and farm needs through technical assistance, business training, environmental education, and experimental projects. To that end, an Institute on Land and Natural Resources was established. Sinte Gleska University provides an Associate of Applied Science degree in Natural Resources to its students. The degree offers a comprehensive study of natural resource management courses ranging from Wildlife Conservation, Range Management, Forestry Practices, and Managing Fishery Resources.

SISSETON WAHPETON COMMUNITY COLLEGE

Sisseton, South Dakota

Sisseton Wahpeton Community College has endeavored to offer an Agriculture and Natural Resources degree program for a number of years. A curriculum has been developed and degree requirements established for an Agriculture Program which only now needs funding.

In 1988 and 1989 Agriculture and Agri-business was a part of the Vocational Program funded under Carl Perkins. However, this

was defunded in 1990. A degree program was written into the next Carl Perkins proposal, but once again was cut out by the Department of Education.

SOUTHWEST INDIAN POLYTECHNIC INSTITUTE

Albuquerque, New Mexico

The Natural Resources Technology Program at Southwest Indian Polytechnic Institute is an environmentally oriented program of study with equal emphasis on forestry, range management, wildlife management, and agriculture. It is an intensive two-year, entry-level job training program designed to be responsive to tribal reservation needs. First year training will include supportive and related education as well as introductory course work in the four major areas. The second year will be devoted to extensive training and field work in all four areas. The program objective is full-time employment upon completion of training. Field experience in the form of co-op training is a required part of the program of study.

STANDING ROCK COLLEGE

Fort Yates, North Dakota

Standing Rock College offers a one-year certificate from their Farm Ranch Irrigation Program. The curriculum is designed to provide students with hands on instruction on agriculture irrigation. Management of agribusiness and equipment are maintained. Requirements of this program also include farm and ranch management and animal science course work along with a summer internship.

With additional staff, equipment, supplies, and renovation, Standing Rock College would be able to train farmers and ranchers in computerization of farm records, organic farming, hydroponics, and environmental issues effecting production. The college could also provide technical assistance to farmers and ranchers in finding alternative ways to increase income in addition to conventional farming.

TURTLE MOUNTAIN COMMUNITY COLLEGE

Belcourt, North Dakota

Upon the securement of additional funding, Turtle Mountain Community College will implement an agriculture program that will cover a number of different areas. Tribal Farmers were surveyed last year and they indicated a desire to have a series of workshops that would address the following: environmentally safe weed control and insect control, effects of pesticides on water, alternatives to

herbicides for weed control, finance, farm record management, alternative crops, orchards suitable for the area, greenhouse agriculture production, nutrition, livestock production, facilities maintenance, retraining of farm laborers who are unemployed because of poor farm conditions, soil management, harvest of native foods, home economics program, and programs that teach the proper utilization of native foods.

Turtle Mountain Community College will employ one full-time staff representative, one part-time representative, one part-time secretary, and one part-time business representative to coordinate the objectives of the program. we will employ adjunct faculty to carry out the education courses described above. The courses will be offered in workshop format at the College.

UNITED TRIBES TECHNICAL COLLEGE

Bismarck, North Dakota

Agriculture is a mainstay in the economic development plans of many of the tribes the institution serves. United Tribes Technical College plans to develop programs that will respond to the needs of the tribes as they develop. The nature of the College, e.g. the diversity of the student body and the lack of a large land base, dictates that its programs be of such a nature that they can serve general needs. To this end, United Tribes Technical College is developing programs in Waste Management with specific experiences being built in for the management of agricultural chemicals. At the present time there is not sufficient funding to secure the personnel and equipment needed to bring the program to reality.

United Tribes Technical College has an association with the Agriculture Research Service, U.S. Department of Agriculture, in Mandan, North Dakota. This Linkage will soon result in a small number of students engaging in Supervised Work Experience in computer applications in agricultural research. The institution plans to develop programs in Agriculture Computing on a larger scale.

CENTER FOR RURAL AFFAIRS
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Testimony of Nancy L. Thompson
Center for Rural Affairs
Walthill, Nebraska

Submitted to
U.S. House of Representatives Appropriations Committee
Agriculture Subcommittee

April 22, 1993
Washington, D.C.

In three years the Farmers Home Administration will mark its 50th anniversary. During most of that history FmHA has performed a critical task of providing affordable credit to beginning and other family farmers in need of assistance. It has helped countless new farm families enter agriculture and establish viable farming operations that underpin the social and economic life of farm communities.

While FmHA has undergone a decade of trouble there are very positive signs that the agency is once again directed towards fulfilling its original purpose of helping new entrants into agriculture. It is extremely important that as this Committee debates appropriations for FmHA, it continue to recognize the new potential and directions that have been started there. We commend Congress for the small but significant steps it took in the FY92 and FY93 appropriations to restore some of the cuts in direct lending that occurred over the past decade.

Passage of the Agricultural Credit Improvement Act of 1992 represents another major turning point in FmHA policy and spending. As a result of the new legislation, a large portion of FmHA loan funds will be targeted for the first time to beginning farmers. These new beginning farmer programs have created tremendous renewed interest in FmHA and thousands of young farmers are

preparing to take advantage of them. For your convenience, I have attached a brief summary of the major beginning farmer and rancher provisions of the Agricultural Credit Improvement Act of 1992.

President Clinton's final budget proposals take some positive steps in assuring adequate funding for FmHA and beginning farmers. This is a welcome and commendable change from his initial proposal which would have cut FmHA direct loan funds by 25% ($42 million over five years), despite their being the most efficient and useful form of assistance to beginning farmers. Those cuts would have produced little savings for the federal budget but would have seriously jeopardized the new efforts at farm business creation that will stimulate significant economic opportunities in rural communities.

President Clinton's budget recommendation is to increase direct farm ownership loans to $79 million (a $12 million increase). This is an extremely important program and we strongly support the President's efforts to increase funding for it. This program will now offer downpayment loans, in addition to regular full term loans, to help beginning farmers buy land and President Clinton's proposal will increase the number of beginning farmers served. Along with the direct operating program, the direct farm ownership program is the most important part of FmHA's lending efforts and it should receive very high priority. We recommend a further increase in funding to $100 million.

Unfortunately, President Clinton is not recommending the same increase in the direct operating loan program but is calling for a $29 million decrease in funding to $796 million. We encourage the Committee to reject this cut but to instead commit increased funds to this program as well. We believe the demand for this program will be high, especially with the new targeting of a portion of the funds to beginning farmers, and no cuts should be made. We recommend instead an appropriation of $950 million dollars for Fiscal Year

1994.

We make special note of the need for strong report language to assure that whatever funding level is provided for direct operating loans, that the agency actually implement the program in line with the subcommittee's decision. Otherwise, FmHA's internal policies may thwart congressional intent. Each year, FmHA establishes goals covering a broad range of issues on program management. The agency's goal in 1992 was to have 80% of all loan obligations guaranteed, despite increased appropriations for direct loans in both 1992 and 1993. State and county employees are evaluated based on their progress in achieving these management goals. Failure to achieve the goals results in a poor evaluation. Consequently, many of the direct loan funds Congress intended to be used by family farmers have gone unused. In Nebraska, for instance, $15 million dollars was returned unused in 1992 because of this policy. Congressional intent will continue to be ignored unless agency management goals are revised. Report language should instruct the Department to revise its program management goals to reflect congressional funding decisions.

President Clinton's budget also calls for substantial increases in all of the guaranteed loan programs. In some cases these programs will be funded at twice the amount ever used in one year. Funding these guaranteed programs far in excess of demand means millions of dollars in loan subsidies go unused when they could be used in programs, such as direct farm ownership and operating, that often run out of money. The primary example of this situation, the guaranteed operating loan program, is recommended to receive $3.5 billion dollars--$2 billion more dollars then was needed this year. Fortunately, a provision in last year's Agricultural Credit Improvement Act will require a transfer of unused guaranteed operating funds to the beginning

farmer downpayment loan program. While this transfer provision will alleviate the problem of having unused funds go to waste in at least one of the guaranteed programs, a less cumbersome and wiser procedure would be to adequately fund the direct loan programs in the first place and not appropriate excess funds for the guaranteed programs. The guaranteed loan programs do not serve the same people or purpose as the direct loan programs and we believe a stronger emphasis should be placed on funding for those direct loan programs.

President Clinton is also proposing an increase in appropriations for credit sales of inventory property and we strongly support this effort. This inventory property can serve a vital public purpose by establishing new or restarting farms. Beginning farmers now have a priority in purchasing inventory property and it is essential that FmHA have enough funds to see that this property be used to create new opportunities in farming.

Finally, we recommend that FmHA's general appropriations for administration and operating costs be increased. The agency has had severe cutbacks in staff and contracting funds over the last few years, leaving it seriously shorthanded to carry out the new responsibilities it has been given by Congress. With the passage of important program reforms and the renewed focus on providing supervised credit to beginning farmers, the agency should be given additional funds to make sure it has the staff needed. FmHA is poised once again to play the important role it did for most of its history in helping beginning and other family farmers start viable operations. Appropriations to the agency should reflect this renewed enthusiasm for its second half-century of service.

AGRICULTURAL CREDIT IMPROVEMENT ACT OF 1992
Section by Section Summary of Major Beginning Farmer and Rancher Provisions

SEC. 5 - FEDERAL-STATE PARTNERSHIP

Establishes a partnership between FmHA and qualified state beginning farmer programs. Directs FmHA to make down payment loans as part of joint ventures with state programs. Makes some state beginning farmer loans eligible for FmHA guarantees, and waives guaranteed loan fees. Requires memoranda of understanding between FmHA and qualified state programs concerning implementation. Establishes an advisory committee to help develop and advance the partnership program.

SEC. 7 - DOWN PAYMENT LOANS

Creates a new "down payment loan" option within the FmHA farm ownership loan program to leverage private and state financing with limited federal funds. Directs FmHA to make 10 year down payment loans at 4% interest for an amount equal to 30 percent of the purchase price of a farm (not to exceed $250,000) if qualified beginning farmers contribute an additional 10 percent to the down payment. This program should triple the number of farming opportunities created with FO funds.

SEC. 9 - GRADUATION OF BORROWERS

Requires planning for graduation to commercial credit sources for all operating loan borrowers. Limits borrowers to a total of 15 years of direct and guaranteed loans combined, of which not more than 10 years may be direct loans. Existing borrowers with more than 5 years of direct loans or 10 years of direct and guaranteed loans combined are allowed an additional 5 years of such loans.

SEC. 14 - GRADUATION OF SEASONED DIRECT LOAN BORROWERS

Requires FmHA or a contracting third party to annually review loans of seasoned direct loan borrowers to determine if the borrower might be able to graduate to commercial credit. If so, FmHA will prepare a prospectus describing the amounts of loan guarantees and interest assistance FmHA would provide to enable the borrower to carry out financially viable plan. If an offer is made by an area lender in accordance with the prospectus, the borrower will graduate to a guaranteed loan. If not, a direct loan must be made.

SEC. 19 - DEFINITION OF QUALIFIED BEGINNING FARMER OR RANCHER

Defines qualified beginning farmer or rancher as a person who is FmHA-eligible, has not operated a farm or ranch for more than 10 years, will materially and substantially participate in the operation, agrees to participate in the loan assessment and borrower training programs, and does not own property in excess of 15% of the median farm size in the county.

SEC. 20 - TARGETING LOAN FUNDS

Transfers 75% of guaranteed operating loan funds that are not spent by the end of the third quarter of the fiscal year to the new down payment program.

Earmarks loan funds for beginning farmers and ranchers as follows:

Direct farm ownership loans - not less 55% of 1994 funds, not less than 65% of 1995 funds, and not less than 65% nor more than 70% of funds in succeeding years, with not less than 60% of these funds reserved for the down payment loan program.
Guaranteed farm ownership loans - not less than 25% of total funds available each year.
Direct operating loans - not less than 30% of 1994 funds, not less than 40% of 1995 & 96 funds, and not more than 50% of funds in succeeding years.
Guarantee ownership and operating interest assistance funds - not less than 40% of total funds available each year.

(The targets for guaranteed farm ownership, direct operating, and interest assistance funds apply for the first 6 months of each fiscal year.)

AFGE

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES
AFL - CIO

LOCAL 3354 - P.O. BOX 366 - ST. LOUIS, MO 63166 - (314) 241-6652

April 15, 1993

The Honorable Richard Durbin, Chair
U. S. House of Representatives
Agriculture Appropriations Subcommittee
Washington, D. C. 20515

Dear Congressman Durbin:

Thank you for calling me last Monday. I hope that you find that Statement I have prepared helpful.

Please include the enclosed Statement in the official record of your Subcommittee hearings, or whatever the protocol is, please see that it is read by other Committee members.

We look forward to possibly discussing these and related issues with you in more depth in Edwardsville on April 26.

Sincerely yours,

Steve

Steven M. Hollis

Statement from the AFGE Local 3354

to the

United States House of Representatives Appropriations Committee Subcommittee on Rural Development, Agriculture and Related Agencies

The Honorable Richard Durbin, Chairman

Contact:

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Introduction

My name is Steve Hollis. I have worked as a Computer Specialist in the Farmers Home Administration-St. Louis Finance Office and Service Center since 1982. For the past three years, I have been a member of a team of systems analysts who have been responsible for researching, recommending, acquiring, and implementing new methodologies and technologies to improve the way FmHA plans, develops, or acquires, information systems. Our team has now been assigned to work with the USDA Info Share project to develop a common approach to information systems among the FmHA, RDA, ASCS, SCS, FCIC, and Extension Service.

For ten years, I also served as President of AFGE Local 3354. As "a good organizer should", I have now helped bring forward a team of new Local Union leaders. I now serve as Legislative and Political Action Director for our local.

The American Federation of Government Employees (AFGE), AFL-CIO, is the largest federal sector union, representing over 700,000 federal workers in the civilian agencies of the federal government. AFGE Local 3354 is the largest Local Union within the Farmers Home Administration, USDA, representing over 700 of the 850 employees of the FmHA-St. Louis Office. Over 50 of our workers live in Congressman Durbin's congressional district, and we are pleased to have this direct link with the Chair of the House Appropriations Subcommittee on Rural Development, Agriculture, and related agencies.

As government workers and taxpayers, we are concerned, not only about our own job security, income security, and working conditions, but also about the policy directions taken by our agencies. AFGE Local 3354 has been active in networking with USDA and FmHA field office employees, the North American Farm Alliance, the Rural Coalition, the National Rural Housing Coalition, the National Family Farm Coalition, the Federation of Southern Cooperatives/Land Assistance Fund, and other farm and rural advocates and organizations.

This statement will focus on two important areas of concern which we share with a great many front line USDA workers and clients - USDA reorganization, and Guaranteed Loans "vs." Direct Loans. In a third section, we will also briefly comment on other important issues regarding FY 1994 appropriations.

USDA Reorganization, with a focus on FmHA

Background

In 1931, during the Depression and on the eve of the New Deal, America was introduced to rural poverty through the fictional character of Jeeter Lester, on "Tobacco Road". In contrast to the hopeless despair of Jeeter Lester, when the Joad family, in "Grapes of Wrath", found their way to Weedpatch Camp, they saw hard visible proof that their government really cared about them and the hundreds of thousands of people like them.

Weedpatch Camp fictionally represented the Resettlement Administration and the Farm Security Administration, predecessors to FmHA, which was launched by Congress in 1947. In 1961, FmHA programs were again expanded by Congress as part of the "war on poverty". Historically, FmHA has played a proud and important role in mobilizing government resources to challenge rural poverty. Our field office structure historically meant personal and effective delivery of rural farm and housing programs.

During the 1980s, however, the Reagan-Bush administration worked overtime to dismantle FmHA and its programs, to transform USDA from its focus on family farmers and rural poverty to focus on providing research services and export subsidies to agribusiness corporations. In 1984, the "President's Private Sector Survey on Cost Control" made the following recommendations for FmHA: promote graduation and improve loan quality; move to guaranteed loans; transfer FmHA housing function to HUD; close and consolidate field offices. It is most unfortunate that, in the rush to develop a comprehensive economic package, the new Administration has adopted some of these general "assumptions", which were put in place during the Reagan years to accomplish political and ideological goals with which we believe the new administration disagrees.

FmHA employees, borrowers, and supporters fought back. In 1985, the Senate Budget Committee voted to abolish FmHA housing programs and transfer them to HUD. AFGE mobilized FmHA workers and friends, and we successfully convinced Congress to overturn this Administration initiative. We helped get the Agricultural Credit Act of 1987 passed, enabling the government to minimize its losses and maximize recovery of delinquent farm loans, and providing a better chance for small farmers to stay on the land.

The Reagan-Bush Administration then turned to various initiatives to dismantle FmHA from within. Through the Administrator's "Strategic Plan", FmHA workers are being forced to perform our work in such a way as to eliminate low and moderate income rural people from FmHA programs and to discourage their requests for assistance. When combined with dramatically reduced appropriations levels for direct loan programs, this has led to a reduced "case load" which has, in turn, been used as

the criteria for closing offices. Office closings have made it impossible for low income people served to transfer their applications to the remaining offices. They are being lost from the system.

The approximately 110,000 employees of the USDA not only serve farmers, but also rural housing needs, food safety and assistance programs, environmental concerns, and many others. We, the workers who are on the front lines of service delivery are ESSENTIAL to the success of these many, varied programs. We are also COMMITTED TO IMPROVING the quality and efficiency of our service delivery. The waste, abuse, and corruption which does exist in USDA comes primarily from the very purposeful mismanagement which has been installed during the Reagan-Bush years to dismantle and privatize our programs and services.

As a worker from our FmHA office in St. Louis states in her letter (Attachment 1):

"One of the reasons I like working for FmHA is because it gives me satisfaction to help people. I know that some of our programs are abused and others are administered badly, but that can be fixed if someone has the will to do it."

A County Supervisor from Wisconsin, who has worked for FmHA for nearly 27 years, put it like this (Attachment 2):

"While it is difficult to express all my concerns, I would like to add the following before closing:

" (1) FmHA employees are not opposed to change, and are willing to adapt to it.

" (2) Strict line by line management from the top is not an effective way to serve the public, it is an effective way to shut down programs, (and) lower morale."

In the FY 1993 budget and appropriations for USDA, the Bush administration proposed to cut FmHA staffing (FTEs) by 600 positions, in addition to the 925 positions transferred from FmHA to the new, unnecessary, and wasteful Rural Development Administration (RDA). The Congressional appropriations committees rejected these additional staff cuts and restored the 600 FTEs. However, Congress did reduce the appropriation level for "Salaries and Expenses" by about 9%. It is our understanding this was specifically for the purpose of restricting FmHA's procurement of computer systems and services. Because the restriction on contracting for computer hardware and services was not specifically written into the legislation, Congressional intent was not followed and the previous administration continued to cut FTEs, close and consolidate field offices, even after the November election. The agency has also continued to spend money, wastefully, in unnecessary and poorly managed contracting out actions. It is our belief and hope that those actions, at least, have been satisfactorily stopped, or slowed down, by Secretary Espy's freeze orders and the new administration's stated intent to closely review all government contracting out programs.

Streamlining the Loan Application and Servicing Process

Chairman Durbin asked me to specifically suggest ways to streamline the processing of FmHA borrower's requests for assistance, including reduction of paperwork and improved communication and information sharing. I have also been told that Secretary Espy is very concerned about this issue, and that his support, as Congressman, for creation of the RDA resulted from his frustration with FmHA offices telling constituents they "didn't have time" to process rural housing applications because they were "too busy with farmer programs". As I stated in a recent letter to Acting Administrator Sharron Longino, my experience suggests that, in most cases, the local FmHA official who said that was probably just making an excuse – the real problems were coming from the top down.

The Loan Making and Loan Servicing processes of the FmHA can be streamlined quite effectively if the Congress and the new Administration make a basic policy decision that the agency is not primarily a bank or a collection agency. It is an anti-poverty Agency which provides individualized subsidies and assistance in support of rural economic development from the bottom up. The purpose of the agency should be to provide appropriate assistance in a timely manner, primarily through direct loans and grants. That was NOT the purpose of the agency in the eyes of the previous administration, and that is the primary reason loan making and loan servicing became such a problem for our clients during the 1980s.

° **The FmHA Strategic Business Plan**

The FmHA Strategic Business Plan, developed during FY 1990, 1991, and 1992, under the direction of Roland R. Vautour, the former Under Secretary for Small Community and Rural Development, and La Verne Ausman, the former Administrator of FmHA, provides a clear summary of the previous administration's policies. Many of the objectives contained in this plan have already been implemented in the form of office closings, centralization and specialization of underwriting, appraisals, and review functions under the State Offices, and performance standards imposed on State, District, and County officials and employees. The result has been to add another layer of bureaucracy, removing much of the authority from the county level personnel, and this is a lot of what has brought the loan making and loan servicing process to a virtual halt.

This Strategic Business Plan is also currently being used as the basis for a multi-million dollar project to develop and implement an Information Systems Plan for FmHA computer systems. The policies underlying this plan are disastrous for rural Americans and USDA workers, and unless they are stopped now, and a new strategic direction is developed by the new administration, USDA reorganization will likely fail and many tax dollars will be wasted.

- **Don't Blame The Workers For Mismanagement**

Relations with employees under the previous administration have been Orwellian to an extreme. There has been a lot of propaganda and public relations/marketing of top management's "correct" view of the world and the Agency's mission. However, the primary form of communication to employees has been intimidation and control.

Sometimes the intimidation takes a direct form, as in performance standards mandating hard and fast numerical quotas for loan making and loan servicing. Do this, no matter what the circumstances, or your job is on the line. What we want to make clear is that this intimidation and control of the workforce has been used to destroy the direct loan programs in a manner that was thoroughly planned and implemented through executive action, bypassing Congress for the most part.

As an example, for several years, the Administration has mandated that 73 to 80% of all FP loan dollars obligated annually will be guaranteed. Because of this performance standard, combined with the low level of interest by the private sector in the FmHA guaranteed loan programs, State, County, and District personnel have been forced to use "any means necessary" to deny farmer applications for direct loans. Grassroots farmer advocates have consistently won appeals of these denials, but by the time the appeal process achieves a final decision overturning the denial of last year's operating loan, it is already time to apply for the new year's operating loan. The new application is again denied, and the cycle is repeated. As a result, even the much-reduced authorization levels for FP direct loans have not been 100% used, and many farmers have given up even applying for such loans. These results of this conscious administration policy are then fed back to Congress as justification for further reducing the appropriations levels for direct FP loans.

RECOMMENDATION:

Numerical quotas to State, District, and County personnel which mandate that, no matter what conditions are, a definite percentage of loans made must be guaranteed — or a definite percentage of delinquent loans must be liquidated, or a definite percentage of borrowers must be graduated, or a definite percentage of inventory property must be sold no matter to whom or on what terms — should be immediately withdrawn by the new administration. Let the budget and appropriations process of the new Congress and the new administration establish State, District, and County loan-making authorization levels for various programs, as appropriate. Then urge the field personnel to fully use all of those authorizations to make successful loans, taking into account conditions which may arise, including the need to reallocate unused funds from one area to another which proves to have a greater need. Use performance standards to encourage field office employees to fully utilize loan authorization levels, to make positive loans in a timely manner, and to take

corrective action with employees whose adverse decisions are constantly overturned in the new independent appeals process.

A second form of intimidation and control that has been used to discredit FmHA is described well by the County Supervisor from New York (Attachment 3):

"It seems that in the last four years the bureaucracy, forms, analysis, reviews and reports have quadrupled. It would almost appear that the idea is to bog us down so deeply in a quagmire of paper that we can no longer accomplish our mission of assistance to rural America. The delinquency rate is no lower, not even the first year delinquency, in spite of all those 'precautions'. In fact, all the upper management has done is decrease our ability to make loans while we wade through a steadily increasing maze of forms and reports."

The FmHA Strategic Business Plan states that streamlining of the loan making and servicing processes "will be done in concert with the objective on finalizing the basis for restructuring (USDA)." Yet, the restructuring that has already been done by the previous administration has increased the complexity of such things as forms, work processes, reports, and internal control systems dramatically during the past four years. To make a simple farm operating loan, whether $5,000 or $100,000, over 80 items must be documented by the County Office.

Who should know better, and be asked, how to streamline our processes than the customer? As a farmer from mid-Missouri told me:

"Some of the paperwork is necessary. Some is created to thwart the process and discourage borrowers. One thing they use to deny loans is that the borrower's information is never enough. FmHA waits the full 60 days, or whatever the law allows, and then requests additional information. FmHA knows what they need and many times even knows up front they are going to approve the loan. There should be a direct consultation meeting between FmHA and the borrower to review the application and information personally. Borrowers should not have to fill out all the forms every year when they have previously been approved. Eligibility determinations are supposed to be good for two years. Forms are outdated and ask for duplicate information. Their readibility 'sucks'. They haven't been revised in 20 years, just added to and added to. There should be a simple basic application, even simpler for repeat borrowers, then a meeting to determine if more information is needed. And the state office reviews should be eliminated and replaced with the new, independent appeals system. The law already requires FmHA to make the decisions within 45 or 60 days, but FmHA has been getting around it."

Finally, let me comment on what to expect, and what not to expect, from information systems improvements, such as those envisioned by the Info Share project. Moving towards a unified methodological and technological approach to information systems within these USDA agencies is the correct thing to do from a technological efficiency point of view, but it will take several years to achieve. In today's complex information

systems world, there is no such thing as "quick fixes". In fact, quick fixes are a major cause of the mess USDA computer systems are in today.

Once the new information systems architectures are in place, it will be possible to share all necessary data between agencies, and that should lead to major improvements in the accessibility of the types of management information which are needed by the administration and the Congress to monitor and manage the effectiveness of our programs. However, sharing computerized data between the agencies will not help speed up the loan making and loan servicing processes that much because the detailed information needed to make and service FmHA loans is very different from the detailed information needed by ASCS to administer the commodity loan and related programs, and both are different from the data needed by SCS to monitor and manage the CRP, Sodbuster, Swampbuster and other conservation programs.

In fact, there is a potential danger involved if USDA and the Congress place the main priority on sharing information between the agencies instead of on rebuilding good relations of confidence with our customers. The integrity of the program delivery systems has suffered immense damage at the hands of the previous administration. Currently, if a borrower gets in trouble with one agency, whether justified or not, the other Agencies pick that up and use it to deny benefits — even though the due process rights of the borrower have not been exhausted in the originating agency. This type of situation has caused a high level of distrust towards USDA and opposition to collaboration between the various agencies. Certainly, the privacy rights of borrowers and employees must be respected. There is also the growing danger that, if government policy regarding conservation and sustainable agriculture continues to rely more and more on regulation of farmers, but nothing is done to increase farm income, then more and more farmers will bail out of the government farm programs altogether. The right-wing "wise use" movement is gaining momentum in many rural states.

The loan making and loan servicing process can be speeded up, however, if the new computer applications are carefully designed to make proper use of the "user-friendly" capabilities of desktop computers. The FmHA's National Association of County Office Assistants and Clerks has identified ways to reduce the amount of time it takes them to enter accounting transactions into the FmHA's accounting systems by several hours per day.

Successfully making such improvements in the user friendliness of USDA computer systems will require the agencies to commit the necessary resources to enable the actual end users to be directly involved, working in teams alongside IS professionals, in the design and development of the computer applications. Historically, at least in FmHA, the Deputy Administrator for Program Operations has been unwilling to make this commitment. Again, there are no "silver bullets" or quick fixes.

Finally, I must emphasize that computer technology is NOT capable of taking the place of direct person-to-person communication and assistance to the borrowers,

especially low- income borrowers. As I stated in my recent letter to Acting Administrator Longino:

"Keep in mind at all times, as we reorganize, the needs of poverty-level, low to moderate income rural Americans, including small to medium size farmers...These clients cannot use computers to access USDA services, cannot afford to travel long distances to USDA offices, and many times, cannot even make effective use of the telephone or the mail, and are generally more comfortable conducting business in person."

Maintain a Dispersed USDA Field Office Program Delivery Structure

The Reagan-Bush administration has sought to recast FmHA along the lines of a large bank such as Citicorp. This involves extensive consolidation of offices, contracting for services, staff reduction, and substitution of lender-oriented loan guarantees for the agency's direct loan programs. The savings are in dispute, but the impact on local very low-, low-, and moderate-income consumers, and employees, is drastic. FmHA is not a bank. It is an anti-poverty Agency which provides individualized subsidies and assistance in support of economic development from the bottom up.

A County Supervisor from Calhoun County, Mississippi, puts it like this (Attachment 4):

"I have worked for FmHA for 22 years and have always felt that FmHA had the best delivery service for programs designed to help needy people. The consolidation and reorganization is not going to serve these people very well. There have been many cases over the years that I have been in Calhoun County where we have delivered loan papers for people to sign because they were aged, sick or had no way to get to our office. This kind of service will be lost if large so called 'super offices' are established. The hands on approach will be gone and the truly needy people will fall through the cracks of assistance available, because they will be unable to travel long distances to obtain this assistance."

Field office employees have emphasized that it is also necessary to conduct on-site visits to prevent waste, fraud or abuse. An Arizona District office employee said (Attachment 5):

"How is consolidating going to be a savings when you add an additional 150 miles to my travels coming from Phoenix? Many trips I now can do in one day will require overnight stays. There are also plans to close the Tucson District Office and the Phoenix District Office by January 1, 1993, and relocate the combined office to Casa Grande. Why spend thousands of taxpayer dollars on all the moves that will be made? There is no need to change something that works."

A County Supervisor from New York has written (Attachment 3):

"We now are errand runners for the bureaucracy. The heartfelt task of local assis-

tance is now mailed to the distant and sometimes seemingly heartless. Centralization may work for urban banks, it may not. They seem to be opening more rural branches. But an employee or contractor a hundred miles away is no help to the poor who have trouble understanding government jargon or need assistance in another language or help overcoming a physical disability."

The "specialization and centralization" of functions in the State Offices should be done based on the type of clients involved in the different programs. The Housing Assistance Council, for example, has recommended that the multi-family housing loan making function should be centralized in state offices, with state office employees located in the field responsible for multi-family housing servicing. They have also recommended that FmHA totally centralize the Section 502 guaranteed loan program in state offices.

But for the single family housing and farmer programs, which are targeted to lower income clients, we must get back to county offices where the employees can know, see, and feel the farm and housing projects. Already, borrowers are having to absorb the cost and time to travel 75 or more miles to field offices. Under the consolidations proposed by Madigan, this would increase to 100-200 miles in many cases. Farmers are REQUIRED to bring product sales checks into the USDA offices for a signature before they can use them. This cannot be accomplished by phone or mail.

Downsize the Wasteful Contracting Out Appropriations

On the national level, AFGE has asked the new administration to conduct a thorough review and reform of contracting out practices as an alternative to attacking federal employee pay and benefits. We are seeking a 10% across-the-board cut in present contracting out levels, saving approximately $40 billion over five years, and enabling Congress and the Administration to restore the proposed, unfair cuts in federal employee pay and benefits.

We ask your Committee to make even deeper cuts in USDA's contracting out levels, and that you require USDA to open direct lines of communications with its front-line, career federal workers, through their elected representatives, who know best where contracted services are wasting untold and unaccountable taxpayer dollars BEFORE moving to downsize the direct USDA government workforce. So there is no misunderstanding, we are not calling for reduced appropriation authorities for acquisition of computer hardware or software, and there is a great need for more employee training, not less. The waste and abuse are in contracting for services that could be performed by USDA workers – the actual analysis, design, and development of information systems and the numerous loan servicing contracts in the field.

Second only to Farmer Program delinquencies, FmHA's Information Systems procurement and contracting has been the most highly visible and controversial subject. FmHA mismanagement of a contracted-out effort to totally revamp our automated

systems during the late 1970s, known as UMIS, has been cited in Information Systems textbooks as one of the classic examples of how NOT to management information systems acquisition. During the 1980s, a comparable mismanaged contract was for the development of AMAS (the Automated Multi-Family Housing Accounting System). AMAS was supposed to be a "turn-key" system, provided by a contractor paid millions of dollars, but in fact was "A MESS", which has required the valiant efforts of nearly 1/5 of the total FmHA/ISM staff to fix, maintain, and enhance since it was implemented in 1985.

In September, 1991, the USDA Office of Inspector General concluded there was an "absence of sufficient documentation to support the decisions made in the areas of Relational Data Base Management System procurement, a procurement of about $12 million; the acquisition of the 3B2/EXP's for over 1,200 offices, valued at over $18 million; the purchase of 386 microcomputers and laptops valued at about $10 million as well as other planned procurements..." They also questioned office furniture purchase orders totaling over $2 million. It was these types of continuing acquisitions which Congress intended to reduce when it reduced the Salaries and Expenses appropriation for FY '93, but restored the FTEs which the current administration had proposed to cut.

As one effort to correct the problems with poor strategic planning identified by OIG and others, FmHA formed a task force of over 30 employees to develop an Information Systems Plan. These employees worked 12 weeks, with a consultant, to develop a plan. Subsequently, top USDA/FmHA management told another contractor to review this plan, and if it wasn't good enough, to do another one. Surprise! The second contractor said the ISP should be scrapped and FmHA then let a contract for the same contractor to do a new ISP for several hundred thousand dollars.

Meanwhile, the recommendations of the in-house CASE Work Group, of which I am a member, were ordered to be redone by yet another outside contractor for another $200,000 wasted. And a first-line supervisor's request for a $78,000 budget for training and travel for the four person in-house Executive Information Systems development team was transformed by the Assistant Administrator into a request for $350,000 in unnecessary and unproductive contractor services (the details of this recent example are recounted by one of the workers in Attachment 6 to this Statement). What are we here for, to enrich the private contractors or to improve the government's information systems?

Additional problems with contracting out in USDA/FmHA include the following:

- Contracting out for services must either cost more, or yield lower quality work, or both, because it builds in the profit motive of the contracting firm.

A County Supervisor from Mississippi states (Attachment 4):

"Some contracting for services which FmHA can't handle otherwise or where there

is a shortage of employees is good. Some areas of contracting, however, had led to great increases in costs. One of these areas is contracting for repair on inventory houses. Previously, we made subsequent loans for the needed repairs. Now since we contract for them, the costs have doubled and tripled. This is due in part to lack of competition, because our solicitation forms are so complicated and partly because contractor feel the government can pay more. If we were making subsequent loans like we used to then the contractors felt they were working for the homeowner and did not charge as much."

And a County Program Assistant from Tahoka, Texas, cites the following (Attachment 7):

"The supervisor needs an assistant to run the office without the stress of doing it alone. I don't understand why we pay contract help around $21.00 an hour to work and service loans when an assistant supervisor would be more effective and feasible."

- Working with contractors takes almost as much, sometimes more, of our time that doing the job ourselves.

An employee who works on the MFH program reported that RRH appraisals can be done faster, and better, in house. Soliciting for bid and reviewing contractor deliverables takes almost as much time as doing it ourselves. The contract says the appraisal must be done in 45 days, and usually we get it on about the 50th day, after several phone calls. After all that time, the deliverable is often unacceptable, and we must go back to the contractor to have them do it again. Meanwhile, a low-income housing project is being delayed. This process can't be cost effective.

- Contractor work is often of poor quality.

In addition to the above examples, a County Supervisor from New York reports (Attachment 3):

"Contracting to me has meant nothing more than accepting lower quality at higher cost. With the exception of farm appraisal, my experience has been negative. The stringent requirements to use realtors and contract out work has been terribly inefficient and expensive. The quality is gone, the heart of the FmHA worker is missing. I have personally had two cases of my contractor being incarcerated while the contract was still in effect."

Contracting out should be the last resort instead of the first alternative!

The Rural Development Administration

If the new administration wants to send a message that government bureaucracy is going to be streamlined from the top down, instead of cutting the front-line workers at the bottom – and if the Congressional Agriculture Committees are going to eventually

approve plans to consolidate some USDA agencies – the dissolution of RDA could well be the best place to start.

As a St. Louis FmHA worker wrote (Attachment 1):

"I consider the new Rural Development Administration an abuse of the use of taxpayer's money. I have attached a paper I wrote in outrage when I found out about it. It already has regional offices in place, but those people could be put back under FmHA and save a great deal of money in the future by dissolving the new, unnecessary agency."

Thus far establishment of the RDA has only resulted in the creation of more offices, transfer of bureaucrats, and upheaval.

Worse! Subtitle B established a five state demonstration for State Economic Development Review Panels. Under this demonstration, representatives of special interests will be permitted to recommend allocations of federal funds which will override normal appropriations processes. The law requires little federal oversight of this process.

During the National Family Farm Coalition Annual Meeting, December 11-13, 1992, the Idaho Rural Council reported that they had attended, and sought to participate, in the RDA "development council" for their region. They were informed that there was no interest in farming in the RDA concept of "rural development. They reported that the council discussion centered on how to reduce local environmental regulations to make it easier to attract minimum wage businesses and corporate livestock factories.

Not only does the RDA represent an irresponsible fiscal and bureaucratic nightmare in this era of streamlining government, the whole approach to rural development is fatally flawed. The real base of the rural economy is family farming. A farmer from Wisconsin gave the following factual account of a situation in that state.

"The rural development interests proposed to build a hog factory. The factory would employ 6 people to handle 1200 sows with a total payroll of $150,000 annually. In the first place, this meant that five of the six workers would still have incomes below the poverty level. More important, the factory would displace 21 family farmers. County statistics in that area show that, on average, a family farmer spends $209,000 in the local community per year. The net loss of income to the local community would be $4,239,000!"

There has been Congressional opposition to RDA within the appropriations committees and elsewhere from its inception. That RDA is not much of a political plus, even for its principal co- sponsors in whose home districts the regional offices were located, is exemplified by the defeat of Representative Thomas Coleman (R-Mo.) in the November election. We call on your committee to again take a real hard look at the cost effectiveness and implications for the rural economy of the RDA before approving

any reorganization of USDA.

Not So Fast! On USDA Reorganization.

As federal workers, we do not normally want Congressional Committees to "micro-manage" government agencies or programs. But we believe the plans to reorganize USDA which have so far been presented in the President's Budget proposal have been ill- conceived in haste and cannot succeed.

Through our National Union Office, we are currently attempting to establish a national-level consultative process with Secretary Espy and the new USDA administration. If we are allowed to do so, we will be more than happy to work with USDA management, line by line in the detailed budget process, to identify positive ways to cut wasteful expenditures to achieve the budget savings projected by the President and OMB for FY 1994, while working with the new USDA management to "reinvent" USDA in a way that makes sense, not just to save $1 billion in the budget book.

However, we are taxpayers and voters too, and this is a MAJOR reorganization with far-reaching policy implications. The essence of American democracy and its checks and balances is that Congress holds the purse strings. We ask your committee to use this "power of the purse strings" to insure that USDA reorganization is planned and implemented using the following terms and conditions:

- Mechanisms are established to insure that USDA workers and clients are consulted prior to reorganizing or downsizing the USDA field office structure. We have heard that Secretary Espy is interested in developing some sort of "farmer advisors". We believe this concept should be expanded to establish some sort of ongoing "Advisory Councils" comprised of clients, representatives from nonprofit organizations with on-the-ground experience with USDA programs, and including elected federal employee representatives, to review and assess past problems with program delivery, including the USDA organizational structure, training and outreach programs. Such councils should be consulted in planning new directions in both policy and organizational implementation; and then, to monitor the effectiveness of rural housing, farming, and community development programs and program delivery and make recommendations to both USDA and the Congress.

Through such "Total Quality Management" steps which clearly show that, once again, customer satisfaction is a priority at USDA, the appropriate groundwork could be laid for possible agency consolidations.

- Using these advisory councils and other means, USDA should reassess the impacts of a NAFTA or GATT agreement on family farmers using realistic expectations instead of overly optimistic calculations. The number of jobs lost in farming and related small businesses needs to be analyzed with the ripple

impacts on the health of our rural communities. The impacts on producers in the other nations needs to be assessed as well. This type of analysis really needs to be done before Congress votes on these trade agreements, and before major USDA policy and organizational decisions are made by the new administration.

- Using these advisory councils and other means, the new administration should review the strategic business plans of FmHA and other USDA agencies and develop new strategic plans which reflect the policy directions which the new administration proposes to take before undertaking reorganization. This should include a real hard look at the cost effectiveness and implications for the rural economy of the RDA.

- Using these advisory councils and other means, the new administration should conduct and present to you a thorough review of USDA's wasteful and ineffective contracting out program. Cuts should come first here before downsizing the workforce or the S&E monies which support that government staff.

- USDA reorganization should maintain and strengthen agencies with programs of assistance for rural economic development and environmental protection – targeting low to moderate income rural Americans and community- based development, including housing, community facilities, small to medium-sized farms, businesses, cooperatives, and community- based lending institutions – with a delivery system that maintains locally dispersed (State, District, County) offices. It is probable that some existing USDA agencies should be consolidated, or at least co-located where they are not. However, what is crucial is:

 a) the provision of a coordinated and comprehensive program of assistance for rural development from the bottom up;

 b) a rural field delivery structure that provides the maximum possible direct people-to-people, hands-on, assistance to low to moderate income rural people in making the most of the opportunities provided by the programs; and

 c) maintaining, and rebuilding as necessary, the current staffing levels of non- supervisory, front-line workers, while reducing the unnecessary and counter-productive numbers of supervisors and managers as well as reducing waste and abuse in contracting out.

Direct "vs." Guaranteed Loans

The previous administration's focus on shifting from direct to guaranteed loans transforms the mission of the Agency from helping low to middle income rural Americans to subsidizing financial institutions. The original mission should be restored.

In your FY 1993 Agriculture Appropriations bill, the $850 million funding for direct operating loans reaffirmed the need for a re- focus on direct lending as a reflection of the failure of the guaranteed loan program for the taxpayer and the farm borrower. Given the policies of the previous administration outlined above, we were disappointed, but not surprised, to find out that $279 million of the FY 1992 allocation was not spent despite many applications on hand. We hope the new administration will see to it that farmers will in fact receive operating funds during the upcoming months.

We were both disappointed, and surprised, that the new administration's "Vision of Change" document and budget proposal calls for a 25% cut in FmHA direct loan program, which ignores the critical need and important role of direct loans for beginning, minority, and limited resource farmers. We hope that this Subcommittee understands the importance of increasing FmHA direct loans to meet needs, not cutting them.

FmHA's guaranteed FP program, so far, has not worked (see GAO's September 1989 report, GAO/RCED-89-86). The guaranteed loan approach has presented the following problems:

- Guaranteed loans cost more to subsidize. FmHA direct loan money is borrowed at the Treasury rate, which is lower than the prime rate which private lenders can get money for. To subsidize private sector loan rates to make credit affordable to low and middle income rural people costs more than direct loan subsidies do.
- Rural lenders have not participated aggressively in the FmHA guaranteed farm programs, nor in the Federal Housing Authority insured housing programs.
- An August, 1989, survey by the Office of Thrift Supervision showed that 6,212 counties, mostly rural, did not have a federally-insured savings and loan association or branch. This is 19.3 percent of all counties.
- Some rural banks participating in the guaranteed FP loan program have used that program to bail out bad loans.
- GAO found that FmHA farm guaranteed loans produced higher cost of money, stricter loan terms, and a greater likelihood of liquidation.

However, the limited funding available for direct FP loan programs, and the need to target those funds to those most in need, including young, beginning, re-starting, and

minority farmers, creates a need for some form of guaranteed loan and "Farmer MAC" secondary credit markets, to assure that slightly larger farmers can obtain needed credit without bumping those most in need of direct loans.

RECOMMENDATION:

The Subcommittee should continue the shift, from guaranteed loans back to direct loans. An appropriate guaranteed loan program, with implementation of the "Farmer Mac" concept, could be an appropriate way to provide for the credit needs of the medium sized farms, provided that 1) loan servicing and restructuring rights, such as provided by the Agricultural Credit Act of 1987, are provided to guaranteed borrowers, and 2) targeting of enhanced appropriations for direct farm ownership and operating loan programs to those most in need are enforced.

We support the request of the National Family Farm Coalition that the funding level for direct farm operating loans be increased to $950 million, direct farm ownership be increased to $100 million and $100 million in funds for the guaranteed farm ownership interest assistance program, and $400 million in guaranteed farm ownership and $400 million in guaranteed operating loans with interest assistance. We also support a minimum of $200 million in the credit sales for inventory land so that limitations on appropriations are not used as a further justification to sell the inventory land to non-FmHA purchasers.

Other FY 1994 Appropriations Issues

The most important issue is to raise farm income by increasing farm gate prices using the commodity loan program. As Chairman Durbin stated in a recent conversation, the overall economic situation in the rural areas is the major determinant of the success of FmHA loan and grant programs.

The dual goals of the new administration to achieve both deficit reduction and economic growth make it imperative for this Subcommittee to initiate a reevaluation of the commodity loan program. When commodity loan rates were at "parity" levels and supply management was used, up to the early 1950s, farm programs actually yielded net income to the Treasury. As commodity loan rates have forced market prices down, welfare-like deficiency payments to make up some of the marketplace loss have been put in place of government regulation of the market through supply management.

RECOMMENDATION:

Investigate the true costs of farm programs when examining areas of the budget that could be cut while not further reducing the record low farm income levels of producers. This includes fair analysis of the impact of increasing commodity loan rates and target prices to meet needs instead of the politically charged OMB analysis of the past twelve years. An analysis should also be made of the true budget costs of the Export Enhancement Program (EEP) and the Dairy Export Incentive Program (DEIP), including the impact on farm income and the impact on grain companies or processors that are involved in negotiating the deals.

If properly understood, reduction of deficiency payments by raising the commodity loan rate to cover the cost of production would be the best means for financing the needed increases in direct farm ownership and operating loans.

We are very pleased to hear that the administration's budget proposes to fully fund the Section 2501 authorization of $10 million for outreach and education programs to minority farmers. This money is intended to go directly into the hands of field people who work in a hands-on way with minority farmers and rural people to get applications in to FmHA and other government programs, to work on appeals in relation to FmHA and other government programs, to set up cooperatives, etc. For example, the efforts of the Federation of Southern Cooperatives, in south Georgia alone, have been able to help as many as 600 minority farmers stay in farming in the past. We urge the Subcommittee to support this item.

Attachment 1

12-2-93

Dear President Clinton,

I am an employee of the Farmer's Home Administration (FmHA) in St. Louis.

I voted for you because I believe you will put Humaneness back in our government. Twelve years of lack of concern for people has almost broken us, and I feel like you can reverse the trend.

I felt compelled to write because right before the election my agency and my department (USDA) were getting a lot of negative press. Many times I heard the quote that "USDA has more employees than there are farmers in the whole country." Not once did I hear anyone say that it was an inappropriate thing to say. Nobody mentioned that we run the entire foodstamp program, the Forest Service, or the extensive research USDA has done to benefit <u>all</u> Americans not just farmers. And that's only the beginning!

Because of my agency, people in rural areas have homes that they would not have had without us. Rural communities

have safe water to drink and fire protection that they would not have without us. One of the reasons I like working for FmHA is because it gives me satisfaction to help people.

I know that some of our programs are abused and others are administered badly, but that can be fixed if someone has the will to do it. I consider the new Rural Development Administration (RDA) an abuse of the use of taxpayer's money. I have attached a paper I wrote in outrage when I found out about it. It already has regional offices in place, but those people could be put back under FmHA and save a great deal of money in the future by dissolving the new, unnecessary agency.

I believe you have the will and the skill to work with Congress to solve this country's problems. You have my support and prayers.

P.S. I'm not ignoring the awful national deficit, but I believe we need a shift in our priorities.

Sincerely,

Linda Kelley
9150 Cordoba Ln.
Crestwood, MO
63126

SUMMARY: In light of the current economic climate in this country, the creation of the Rural Development Administration (RDA) is fiscally irresponsible when the Farmer's Home Administration (FmHA) already has existing programs doing exactly the same work.

FACTS: FmHA already operates a large loan/grant program under the collective name, Community Programs. This program includes loans and grants to associations and communities for community facilities, water, waste, waste disposal, grazing, irrigation, Indian land acquisition, and insured/guaranteed business and industry loans.

It would be significantly less costly to add the necessary staff to the existing FmHA organization than to create a whole new level of upper management, regional offices, and field offices.

OPINION: I find it completely incomprehensible that Congress would create RDA, and that the President would sign the legislation at this time. To create a whole new agency with all its related start-up costs and the resulting new bureaucracy is totally irresponsible financially.

Granted, it sounds good to say you are helping rural development in these difficult times; but we already had the organizational entity in place to help. And it did not require a new agency. At most, it might have required one or two new people in each of FmHA's 46 state offices whose sole job would be to concentrate on rural development. Then make sure the loan/grant funds are available. There is absolutely no need for a whole new layer of highly paid upper management personnel.

This course of action is even harder to understand in light of Secretary Madigan's recent testimony before the House Committee on Agriculture. In that testimony, he talked about consolidating rural services. The people in USDA's field offices are already swamped with work, and that is where all the cutting is scheduled to take place. That makes no sense. It is true that USDA's work has become much more complicated in the past 5 years, and that a high level of management skill is needed to effectively administer the incredibly wide range of services we provide to the country. However, it makes no sense to add the administrative costs of high level salaries in RDA under the current fiscal circumstances.

RECOMMENDATION: Stop RDA before it costs even more money than it has already.

Attachment 2

Steven M. Hollis, President
AF&E Local 3354
P.O. Box 266
St. Louis, Mo. 63166

Re: "USDA Workers Speak Out"

I am worked for FmHA for nearly 27 years, over 15 years of that as a County Supervisor. In the years I have helped hundreds of farmers and thousands of people to become homeowners. There of course have been many heartbreaking stories and of course failures.

Giving away with programs is not really the answer to helping rural americas. Doing a better job is the answer, which can benefit both the customers and the Government (taxpayers). The programs become more and more complicated, less funding, and greater management from the top which makes the County Supervisor a robot, making one wonder why we were hired for our job. There has been many things done to kill the programs: ① cut funding ② make requirements so difficult to meet, that people are discouraged to apply.

At the present time FmHA offices are being restructured. Wisconsin will close 25% of county offices and consolidate these areas with other offices. While some of these actions are not all bad, the "plan" really is to shut FmHA down further. With curtailment of direct funding and a push for guaranteed loans, offices will reduce caseload numbers. With normal attrition and graduation the caseload will diminish giving

over decades justification to cut positions — the plan becomes a self-fulfilling prophecy.

There have been success stories, every county office in the State of Wisconsin has helped thousands of families become homeowners. Without the Fm HH help there is no way they would have been able to purchase a home, build equity and move on to other assets & good for everyone!

Many success story of a farm account, about four years ago this farm family was being foreclosed on. After much hard work, planning, etc, I was able to put together a credit package to save these the farm. They were good operators, victims of circumstances. I made a large OL & FO loan. Recently the family was able to refinance the OL and the FO loan is performing well.

While it is difficult to express all my concerns, I would like to add the following before closing:

(1) Fm HH employees are not opposed to change, and are willing to adapt to it.

(2) Strict line by line management from the top is not an effective way to serve the public, it is an effective way to shut down programs, lower morale.

(3) concern about Fm HH losses and cost to the taxpayer are real. However these there owners, must take a large share of the blame. Fm HH in the late 1970's and mid 1980's was told to make loans with little regard to quality. In fact many loans "pumped" were taken &

tried to make loans of quality, caution the policy was to make loans to bail out credit institutions of low quality loans. The loans were being issued on value of unnecessary units and is apparently was interfering.

(4) Farmer Program loan servicing regulations should be streamlined. The appeal process is nightmare) — and the foreclosure rights part of it is suspect too.

For helping rural America we cannot lose sight of basics. Not all high risk loans perform, and those that do not should be cleaned up as cost effectively as possible.

(5) In disposing of Farm inventory property, there has got to be a more cost effective way of selling the farms. If we want these programs to work and help people, we must also be cost conscious in cleaning up non-performing cases

(6) Credit quality requirements should not have to result in a strict rich applications.

(7) Selection of State Director for FmHA hopefully should be done more on merit rather than political patronage. Wisconsin has had its share plus of tyrants.

I've said enough for now:

Sincerely
James K Osmon
County Supervisor
Portage, WI

Mailing address
FmHA
P.O. Box 242
Portage, WI 53901

United States Department of Agriculture

Farmers Home Administration

Attachment 3

Steven M. Hollis, President
AFGE Local 3354
P.O. Box 366
St. Louis, MO 63166

December 9, 1992

Mr. Hollis:

I am a GS-12 County Supervisor for FmHA in New York, and have also served as a supervisor in Texas and Guam. I hold an M.S. degree in agriculture, and prior to government service I worked in agricultural sales and communications.

While I do not agree entirely with your letter, particularly the partisan political comments, I must congratulate you for composing perhaps the best synopsis I've seen regarding recent events in the Department of Agriculture. I wish to offer the following observations:

1. Agriculture is vital to America and the world. In virtually all of this country, agriculture is the largest industry in each county and state. It is the lifeblood of the rural economy. As well, food cost in this country must be paid, whether at the purchasing or the production end. The present programs of the USDA can give this country the "most bang for the buck" at both ends, benefitting all Americans. Without these programs, all Americans will suffer. On the international level, it is agriculture which has always led the way in reduction of our balance of payments.

The total rural economy is even more vital. It is a historical fact that problems not effectively met in rural America quickly become the problems of the cities. A healthy rural America will greatly assist in meeting the problems of the cities.

2. The programs of the USDA are at the forefront of the economy of rural America. Being most familiar with FmHA, I can state with pride that we are meeting the challenge at the local level. While large write-offs and losses make the headlines, your FmHA county offices are quietly making rural America. The bad loans get the attention, while 90% of my local farmers are successfully making milk.

I have seen our farm programs first hand, on the farms. The numbers are staggering and in favor of increasing the farm lending programs. Small, family sized farms, poor, rural people and minorities are becoming successful business people, creating jobs and feeding the world for an economical price. If America paid these people by the hour we couldn't afford to eat. The loans and technical assistance given by FmHA County Office employees are vital to this success.

The rural housing program is equally successful, with delinquencies and losses even less. While in my office we daily lament the five percent deliquency, we seem to forget the 95% success rate. I challenge government and private industry to fault, let alone equal, this success rate. I will not dwell on the impetus the housing program lends to other rural industries, as it is so easy just to look at the housing borrowers themselves. I have supervised up to 1400 housing loans in one office with a three percent delinquency and virtually no foreclosures. These are people who would never know home ownership without this program, all others are inaccessible to them. Yes, they often require extensive supervision, in-home counselling and assistance, but I feel they are worth it.

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Secretary of Agriculture, Washington, D.C. 20250

Like you, I have been disturbed by recent trends in USDA. It seems that in the last four years the bureaucracy, forms, analysis, reviews and reports have quadrupled. It would almost appear that the idea is to bog us down so deeply in a quagmire of paper that we can no longer accomplish our mission of assistance to rural America. The delinquency rate is no lower, not even the first year delinquency, in spite of all those "precautions". In fact, all the upper management has done is decrease our ability to make loans while we wade through a steadily increasing maze of forms and reports. There seems to be a lost vision of the mission of this agency. We are here to assist rural America, not fill out forms and make analysis of analysis. They could have saved money just by cutting the budget, perhaps firing several of us. Instead money was squandered in hampering our efforts.

"Contracting" to me has meant nothing more than accepting lower quality at higher cost. With the exception of farm appraisal, my experience has been negative. The stringent requirements to use realtors and contract out work has been terribly inefficient and expensive. The quality is gone, the heart of the FmHA worker is missing. I have personally had two cases of my contractor being incarcerated while the contract was still in effect. The push has been toward private industry, fine, but not so fine in the face of seemingly blind acceptance of fraud, waste and abuse. Contracting the receipt of payments is a complete disaster. We are told to wait for posting, and they take even longer.

And if FmHA jobs have been lost, they are at the clerical level, the people we need the most. The job losses, and failures to refill those jobs are in the County Offices. Where are the job increases? At the "upper echelons". As I told my supervisor, "I can't hire clerks because they are hiring GS-12's to review the work I can't get done because I have no clerks." There is no room in this agency for featherbedding. We in the County Offices are understaffed and overworked, and we and only we are the ones who take this program to the people.

The loss of local control has crippled the programs. We now are errand runners for the bureaucracy. The heartfelt task of local assistance is now mailed to the distant and sometimes seemingly heartless. Centralization may work for urban banks, it may not. They seem to be opening more rural branches. But an employee or contractor a hundred miles away is no help to the poor who have trouble understanding government jargon or need assistance in another language or help overcoming a physical disability.

I would be glad to discuss each point in greater detail, or to write in greater detail. If I can be of further assistance to the incoming administration, please feel free to call on me.

Best regards,

Don Pitts

FmHA, USDA
RD 2, Box 15
Route 4, Moss Street
Hudson Falls, NY 12839

Attachment 4

United States Department of Agriculture

Farmers Home Administration

P. O. Box 558
Calhoun City, MS 38916

December 14, 1992

Steven M. Hollis, President
AFGF Local 3354
P. O. Box 366
St. Louis, MO 63166

Dear Mr. Hollis:

I received a copy of your letter encouraging ideas and suggestions from employees concerning FmHA and USDA. I'm a county supervisor in rural Calhoun County, MS. I have worked for FmHA for 22 years and have always felt that FmHA had the best delivery service for programs designed to help needy people. The consolidation and reorganization is not going to serve these people very well. There have been many cases over the years that I have been in Calhoun County where we have delivered loan papers for people to sign because they were aged, sick or had no way to get to our office. This kind of service will be lost if large so called "super offices" are established. The hands on approach will be gone and the truly needy people will fall through the cracks of assistance available, because they will be unable to travel long distances to obtain this assistance.

Additionally, I feel the establishment of RDA has been a big waste of taxpayer money. All that has been done just sets up another bureaucracy. FmHA already had the trained personnel to handle community program loans. Why in the world would we spend the kind of money that is being spent to set up another agency. I think a very serious look needs to be taken at why RDA was established.

Contracting is another area that needs to be looked at. Some contracting for services which FmHA can't handle otherwise or where there is a shortage of employees is good. Some areas of contracting, however, had led to great increases in costs. One of these areas is contracting for repair on inventory houses. Previously, we made subsequent loans for the needed repairs. Now since we contract for them, the costs have doubled and tripled. This is due in part to lack of competition, because our solicitation forms are so complicated and partly because contractors feel the government can afford to pay more. If we were making subsequent loans like we used to then the contractors felt they were working for the homeowner and did not charge as much.

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Secretary of Agriculture, Washington, D.C. 20250

Finally, the agency seems to be going more and more to specialization of duties. While this may be necessary in some areas, I feel we have gone overboard with it. Field offices are being stripped of good employees and a bigger bureaucracy is being created. In order to effectively serve the rural areas we will continue to need well staffed county offices. I realize that more emphasis is being put on urban areas, however the rural areas are the feeder lines to the city. The stronger our rural areas become, the better our cities will become also. FmHA has historically been of great benefit to rural population in farming, housing and community programs. This must continue if we as a nation wish to help those who are needy.

Sincerely,

William W. Jones, Jr.

WILLIAM W. JONES, JR.
County Supervisor

Appendix 10
Attachment 5

DONALD F. & JANIS E. IRBY
PO BOX 30636
FLAGSTAFF, AZ 86003
(602) 527-1281

December 8, 1992

Steven M. Hollis, President
AFGE Local 3354
PO Box 366
St. Louis, MO. 63166

Dear Mr. Hollis.

In response to your memo dated December, 1992. I enclose a copy of a letter I sent to President-Elect Clinton on November 24, 1992.

The letter states my objections to centralization of the RRH program in Arizona. I cannot understand how a person can find the logic in transferring personnel when an office is not being closed and the job can be handled more effectively at its present location. The cost to taxpayers for moving expenses and, in my case, additional travel expenses because of the large area I cover, will be enormous. This will help reduce the deficit? It is frightening to think of the cost if centralization is accomplished in every state.

We need to convince the new administration that if USDA wants to attract the best employees possible, it should treat the dedicated employees they now have with respect and consideration. Transfers are suppose to be kept to a minimum and only when it is in the best interest of the government. Spending thousands of taxpayer dollars for centralization of programs is not in the best interest of the government if the job cannot be done as effectively.

Good luck in your quest to help all the dedicated USDA-Farmers Home Administration employees.

Sincerely,

Donald F. Irby

DONALD F. IRBY

DONALD F. & JANIS E. IRBY
PO BOX 30636
FLAGSTAFF, AZ 86003
(602) 527-1281

November 24, 1992

President Elect Bill Clinton
112 W. Third St.
Little Rock, AR 72201

Dear President-Elect Clinton,

I am writing this letter to plea for your help.

I have worked for USDA, Farmers Home Administration for twenty years and have worked in seven office locations throughout Arizona. Two of the locations were by choice, five were forced relocations. I currently work in the 515 Rural Rental Housing Program in the Flagstaff District Office. I have to travel to Tsaile on the Navajo Reservation, St. Johns, Show Low, Holbrook to the East, Page to the North, Bullhead City, Kingman, Lake Havasu City to the West and Prescott Valley and Cottonwood to the South, with many communities in between.

Under the current administration, there has been a great deal of talk about centralization of programs because there was going to be a cut or loss of full time employees (FTE) and consolidation would be necessary. However, there was no cut or loss of FTE's this year.

I felt after you were elected that the consolidation would be re-evaluated, but that is not the case. There is now an enormous push to have all this done before your administration arrives.

I received notification last week that I am being relocated to Phoenix effective January 10, 1993. This is obviously a move to implement the current administrations policy before your administration can evaluate the situation. The Farmers Home Administration State Office will be moving to larger office space and I previously understood the consolidation would not take effect until they moved to the new space, possibly sometime in February, 1993. Now, in their haste to get this done before the new administration comes, they are going to transfer employees before there is even space for them. The Flagstaff District Office is not being closed. The other emplcyees will remain in Flagstaff. Why force myself and the loan technician to leave our homes when the Flagstaff District Office is not being closed? What is the logic?

How is consolidating going to be a savings when you add an additional 150 miles to my travels coming from Phoenix? Many trips I now can do in one day will require overnight stays. There are also plans to close the Tucson District Office and the Phoenix District Office by January 1, 1993 and relocate the combined office to Casa Grande. Why spend thousands of taxpayer dollars on all the moves that will be made? There is no need to change something that works.

Farmers Home Administration in Arizona has lost numerous valuable employees to other agencies or states during the current administration. We read articles that USDA wants to recruit and retain the best employees possible. How can this be done if there is no concern for the employees or their families. How do we build for our future when we must start all over again each time we are forced to relocate. We realize USDA must "trim the fat" due to the deficit, but this plan seems to add "fat".

I have been a dedicated federal employee and put in many extra hours on the job. I have continuously met the goals of the program and this is my reward.

Please do not forward a copy of this letter to Farmers Home Administration for a response or I will be persecuted by the current administration.

It would be greatly appreciated if this situation could be re-evaluated after your administration takes office in January. It is unfair that my family and the other employees face this unnecessary disruption of their lives.

Thank you for your assistance in matter.

Sincerely,

Donald F. Irby

DONALD F. IRBY

Attachment 1

UNITED STATES DEPARTMENT OF AGRICULTURE
FARMERS HOME ADMINISTRATION
BOX 369
TAHOKA, TX 79373
(806) 998-4563

December 14, 1992

Steven M. Hollis, President
AFGE Local 3354
P.O. Box 366
St. Louis, MO 63166

Dear Mr. Hollis:

This is in reference to your letter dated December, 1992, in regards to the policies and problems in the FmHA agency.

The Tahoka FmHA office services Lynn and Garza counties in the west Texas area. This agency has been an asset to the farmers and rural area to provide their needs in emergency situations. Because of disaster years in this area FmHA has financed many farmers unable to receive credit from other lenders. If it had not been for this agency many farmers would have been out of business years ago. The local community depends heavily on farm income and the many farm families that Farmers Home Administration assists.

1992 was an unusually busy year for Lynn and Garza counties and the west Texas area. The County Supervisor did not have an assistant supervisor and was under extreme pressure to assist the needs of our borrowers and new applicants who could not receive credit elsewhere. The County Program Technician was on extended sick leave and I, the County Program Assistant, was the only clerical for several months to be responsible for the office. I did finally receive a temporary clerk in February, 1992. County Supervisor, Curtis Barlow, worked numerous hours of overtime (without pay) to survive the workload. He worked a total of 336 hours and 5 minutes overtime. This is on weekends, weekdays until sometimes midnight and on holidays. He was paid for only 85 hours of the 336 hours overtime that he worked. We did however have contract help. This is not feasible since they can not work in the office to help with the actual workload of a county office. The supervisor needs an assistant to run the office without the stress of doing it alone. I don't understand why we pay contract help around $21.00 an hour to work and service loans when an assistant supervisor would be more effective and feasible.

I think Farmers Home Administration is very beneficial to this community. Without FmHA's programs their would be lots of farmers out of business. This office works very close with the lenders in this area. We have made more guaranteed loans this year than in all the years I have worked for FmHA.

I would like for someone in Washington to visit the county office on a busy day in January to see the workload. Our loan season in 1992 was from December to August. There were 3 Guaranteed FO loans and 34 Guaranteed OL loans made. We received 25 Emergency applications. Ten of the 25 were eligible and made a loan to. We received 87 OL applications. We made 70 direct OL loans and 42 subordinations to other lenders. We did this with one supervisor and two clerical employees.

I hope this letter serves as a small contribution that convinces the administration that USDA/FmHA is important, not only to its employees, but to the public that we serve.

Sincerely,

Kathi L Brookshire

KATHI L. BROOKSHIRE
County Program Assistant
Box 1666
Tahoka, Tx. 79373

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